APPENDIX T

RESOURCE MANAGEMENT PLAN

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for the

DRAFT ENVIRONMENTAL IMPACT REPORT

August 2007

Note: This appendix reflects project details current at the time the August 2007 Draft EIR was distributed for public review. As noted in the preface to the March 2009 Recirculated EIR, some project details and analysis have changed since that time and those details are reflected in the Recirculated EIR and appendices.

MERRIAM MOUNTAINS SPECIFIC PLAN

RESOURCE MANAGEMENT PLAN

May 2007

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1.0 INTRODUCTION

1.1 Project Setting

The Merriam Mountains project (Merriam) consists of approximately 2,327 acres located with the Merriam Mountains of northern San Diego County. The site is bordered by I-15 to the east, Deer Springs Road (S-12) to the south, and Twin Oaks Valley Road to the west with a small portion of the western edge of the site traversed by Twin Oaks Valley Road, and the northeast corner of the site traversed by Lawrence Welk Drive. Gopher Canyon Road is located approximately one mile north of the site (see *Figures 1* and *2*).

The site lies within the central portion of the Merriam Mountains, a narrow chain of low mountains generally running north to south with a variety of east-west trending ridgelines and scattered peaks. These mountains originate near the northern end of the urban portions of the cities of Escondido and San Marcos. Large granodiorite outcroppings and pinnacles commonly occur throughout the Merriam Mountains range on the property.

Natural topography on the sites is comprised of hills and valleys dominated by significant rock outcroppings with moderate to steeply sloping terrain. On-site elevation ranges from approximately 850 feet above mean sea level (AMSL) near the intersection of Deer Springs Road and I-15 to about 1,650 feet AMSL in the north central portion of the property. Prominent, generally east-west trending ridgelines divide the site into five separate drainage basins tributary to Moosa Canyon, Gopher Canyon, and San Marcos Creek.

Vegetation on the Merriam site consists of large blocks of southern mixed chaparral with limited patches of Diegan coastal sage scrub, live oak woodlands, and southern willow scrub. Due to the extensive nature of the chaparral covering most of the site, wildlife movement is generally confined to existing dirt roads. Two well-developed riparian areas exist on site, one west of I-15 draining into the South Fork of Moosa Canyon and one in the south fork of Gopher Canyon, between the Merriam Mountains and the San Marcos Mountains.

1.2 Resource Management Plan (RMP) Purpose and Function

The primary purpose of the RMP is to serve as the functional equivalent of the County Resource Protection Ordinance (RPO) for the Merriam Mountains Specific Plan. The Merriam RMP is a comprehensive planning document that addresses the preservation, enhancement, and management of sensitive natural and cultural resources within the 2,327-acre Merriam Mountains Specific Plan Area. The RMP is designed specifically for the Merriam project, a

master planned community providing for clustered development and preservation and management of large blocks of interconnected habitat. The RMP provides assurances and funding for long-term resource protection, management, restoration, and enhancement of the proposed Merriam Mountains Biological Open Space. The Biological Open Space will:

- Provide large (1,192 acres), connected natural areas with varied topography and resources that offer refuge, food, and shelter to multiple native plant and animal species
- Protect scenic and cultural resources
- Provide funding and implementation mechanisms to assure that preserve resources are not adversely affected by adjacent urban development
- Provide carefully controlled opportunities, consistent with resource protection, for the public to learn about and appreciate the natural and cultural diversity of the Biological Open Space.

1.3 Planning Context

The RMP is being prepared and reviewed as part of the overall entitlement process for the Merriam Mountains project. The relationship of the RMP to various related planning documents is discussed below.

The RMP is the result of a series of discussions and negotiations between the applicant, County staff, and the Wildlife Agencies that resulted in agreement on an MSCP "hardline" preserve boundary to assemble the Merriam Mountains core area as part of the draft North County MSCP. The agreement was executed by the applicant and the Wildlife Agencies in October 2005 and is included as *Appendix A* to this RMP. The "hardline" Biological Open Space preserve depicted in the agreement consolidates development in the southern portion of the site and retains 1,192 acres of Biological Open Space in the northern portion of the site as a large core area. The agreed-upon "hardline" has been determined to be an ecologically superior plan when compared with a more piecemeal preserve design potentially resulting from a plan strictly adhering to the parcel by parcel requirements of the RPO. As part of this collaborative planning effort, it was agreed that this RMP should be prepared as a functional equivalent to RPO for the Merriam Mountains project.

1.3.1 Relationship to Merriam Mountains General Plan Amendment/Specific Plan

The RMP is an integral element of the Conservation and Open Space Element of the Merriam Mountains General Plan Amendment Report/Specific Plan. It is consistent with and implements the policy objectives of the Specific Plan with respect to open space and conservation of natural and cultural resources.

1.3.2 Relationship to the County Resource Protection Ordinance (RPO)

The RMP serves as the functional equivalent of RPO for the Merriam Mountains project in that it avoids and protects significant resources that are found on the site. A separate Resource Protection Study has been prepared for the Merriam Mountains project and is included as Appendix F to the Merriam Mountains EIR. Resources addressed by RPO and analyzed in the Merriam Mountains Resource Protection Study include wetlands, floodplains, steep slopes, sensitive biological habitats, and prehistoric and historic sties. Protection of these resources in conjunction with the Merriam Mountains project are provided for and described in the Merriam Mountains RMP.

As a substantial new planned community in the northern portion of San Diego County, consolidating 59 parcels held in 19 different ownerships, the Merriam project offers an opportunity to address resource protection issues for RPO-related resources in a comprehensive manner, rather than on a parcel by parcel or lot by lot basis as more typically happens with application of RPO on an individual tentative map or parcel map basis. The RMP provides for protection and enhancement of resources qualitatively equivalent and functionally superior to that which would occur under RPO; the RMP provides for interconnected resources to be managed together in a, consolidated plan such as might not occur with more piecemeal application of RPO. In addition, the RMP provides funding and assurances for long-term resource protection, management and enhancement, as well as opportunities for public use and enjoyment, which would not occur under RPO.

The project proposes an amendment to RPO, adding an exemption to Section 86.605 – Exemptions to read as follows: “Any project located within the approximately 2,327 acres property known as “Merriam Mountains Specific Plan” if determined to be consistent with a comprehensive RMP which has been adopted by the Board of Supervisors as the functional equivalent of RPO.”

1.3.3 Relationship to Merriam Mountains EIR

The RMP addresses landform resources, biological resources (sensitive habitats and wetlands), and cultural resources also being addressed in the Merriam Mountains EIR. In some cases, measures incorporated in the RMP provide the basis for mitigation measures identified in the Merriam Mountains EIR. The RMP is proposed to be adopted by the County of San Diego in conjunction with entitlement approvals for the Merriam Mountains project along with certification of the Merriam Mountains EIR. Together, these approvals will assure that the policies, programs and measures included in the RMP are carried out.

1.3.4 Relationship to State and Federal Programs and Priorities

No features of the RMP would replace required state and federal programs and permitting requirements. The RMP does, however, address wetland, sensitive habitat, and species resources that are the subject of state and federal regulations and permit requirements and provides for protection and enhancement of resources generally consistent with those programs. The RMP also incorporates a biological resource preserve consistent with that requested by the Wildlife Agencies (U.S. Fish and Wildlife Service and California Department of Fish and Game) and the County as part of the coordinated planning process for the County's draft North County MSCP, as documented in the Wildlife Agencies' points of agreement executed in October 2005 and included in *Appendix A* to this RMP. The RMP has been formulated as a work in concert with state and federal regulatory programs and will support resource agency permitting throughout the project implementation.

2.0 RESOURCE PROTECTION FRAMEWORK

Substantial existing information is available regarding biological, landform/scenic, and cultural resources on the Merriam property. This information is presented in detail in the Merriam Mountains EIR and accompanying technical studies included in Appendices E, F, G, and H to the EIR and is summarized below.

2.1 Biological Resources

The biological resources database for the Merriam property has been assembled over a 5-year period extending from March 2000 to November 2005. As noted in the Biology Technical Report included in Appendix G to the Merriam EIR, field investigations have included vegetation mapping, general botanical and zoological surveys, focused oak tree, California gnatcatcher, and butterfly surveys, a wetland delineation, wildlife corridor studies, and

vegetation mapping and wetland delineation work in the area proposed for the off-site extension of Deer Springs Road (see *Figures 3* and *3A*, *Biological Resources Maps*).

The Merriam site includes a number of vegetation communities that are relatively common in north-inland San Diego County. Southern mixed chaparral (on granitic-derived soils) covers most (about 95%) of the site with all other vegetation communities each occupying less than 1% of the site, including Diegan sage scrub, coast live oak woodland, scrub oak woodland, oak riparian forest, southern willow scrub, mulefat scrub, non-native grassland, and other disturbed habitats such as urban/developed, orchard, and intensive agriculture. The vast majority of the southern mixed chaparral on site has not burned in over 100 years and this has resulted in a large, contiguous, and extremely dense stand of southern mixed chaparral with low diversity of species and limited age class of plants. Terrestrial wildlife movement favors the numerous dirt roads on the site that were originally placed to install and service existing on-site water lines intended for use for orchard irrigation. Relatively few sensitive plants occur on the site because of its geographic location and constituent soils (the site contains largely granitic-derived soils and tends to lack unique soils that support sensitive plants). Three relatively low-sensitivity plants occur on site: summer-holly (*Comarostaphylis diversifolia* ssp. *diversifolia*), Ramona horkelia (*Horkelia truncate*), and Engelmann oak (*Quercus engelmannii*).

Numbers and types of sensitive fauna on the site are somewhat limited given the large size of the site; this is probably the result of the relatively low habitat diversity. Identified sensitive fauna includes the following: northern red-diamond rattlesnake (*Crotalus ruber ruber*), San Diego horned lizard (*Phrynosoma coronatum blainvillei*), Belding's orange-throated whiptail (*Aspidoscelis hyperythrus beldingi*), Cooper's hawk (*Accipiter cooperi*), a single pair of coastal California gnatcatchers (*Polioptila californica californica*), and San Diego desert woodrat (*Neotoma lepida intermedia*). The southern mule deer (*Odocoileus hemionus*) may occur on the site in very limited numbers, presumably because of the prevalence of very dense chaparral that precludes entry by this species (no recent sign of this species was detected during the surveys, although very old droppings were observed).

From a regional and subregional perspective, the Merriam site and the surrounding undeveloped portions of the Merriam Mountains form a large block of undeveloped land adjacent to and east of another large undeveloped landform, the San Marcos Mountains. The County's draft NCMSCP is the proposed subregional plan for this portion of the County of San Diego.

The Merriam site is west of and adjacent to I-15, which includes eight lanes of freeway with a wide median strip and often substantial cut or fill slopes along the freeway. Thus, the freeway acts as a significant barrier to terrestrial wildlife movement. The distance from the Deer Springs

Road overpass on the south to the Lawrence Welk Drive underpass on the north is about 2.7 miles. These two roads represent the only physical crossings of the I-15 corridor that could possibly be used by terrestrial wildlife although there are numerous small culverts (ranging from 24-60 inches in diameter) under the freeway between Deer Springs Road and Lawrence Welk Drive. These culverts are about 600 feet long in an east/west direction and very unlikely to be used voluntarily by wildlife. Thus, the Merriam Mountains are effectively isolated from other habitats for a length of at least 2.7 miles, with probably little or no terrestrial wildlife movement across this barrier. I-15 is less of a barrier for Volant (flying) animals including birds, insects, and bats.

Undoubtedly, some wildlife movement and interchange occurs in a north-south direction along the western side of I-15 and to areas father west of I-15. Most of the land use west of I-15 between State Routes 76 to the north and 78 to the south of the Merriam Mountain is characterized by agricultural groves or undeveloped lands, often rising steeply from the southbound lanes of the freeway. Developed lands in the City of San Marcos restrict wildlife movement to the south.

2.2 Scenic and Landform Resources

Detailed information regarding scenic and landform resources on the Merriam site is included in the Visual Resource Impact Analysis and Resource Protection Study included in Appendices E and F of the Merriam EIR. Scenic and landform resources on site consist of rock outcroppings, promontories, major peaks and ridgelines, major valleys and mature oak trees (see *Figures 4, 5,* and *6*). Distinctive landscape components include Deer Springs Ridge, mature oak trees in the southeastern portion of the site, Twin Peaks, Lusardi Mountain, Merriam Valley, Merriam Mountain, and the rock outcroppings that form the Crown of Rocks.

Rugged and steep topography characterizes the site with about 74% of the site (1,712 acres) characterized by slopes with gradients of 25% or greater (see *Figure 7*, *Slope Category*). Approximately 53% of the site (1,222 acres) meets the definition of RPO Steep Slopes, those slopes with a natural gradient of 25% or greater and a minimum rise of 50 feet. As part of the RPO analysis for the project, steep slopes on the site were characterized as Significant and Insignificant based on the following definitions (see *Figure 8, Significant and Insignificant Steep Slopes*):

Significant RPO Steep Slopes – Those that comprise the memorable features of the Merriam Mountains landmass including visible steep slopes, promontories, and peaks.

Insignificant RPO Steep Slopes – Those that lack the qualities of the Significant Steep Slopes and are typically hidden from public view, not a part of an identifiable peak, promontory or ridgeline and not perceived as an integral element of the Merriam Mountains landmass.

Of the 1,222 acres of RPO steep slopes on the site, approximately 576 acres are classified as Significant and 646 acres as Insignificant.

2.3 Cultural Resources

Detailed information regarding cultural resources on the Merriam site is included in the Cultural Resources Technical Report, Appendix H to the Merriam EIR. The cultural resources investigation conducted by Gallegos & Associates included literature review and field survey and confirmed the location of eleven cultural resource sites and two isolate finds (SDM-W-3880C and P-37-025968) are within the 2,327-acre Merriam project area and off-site project improvements. These cultural resources site are: CA-SDI-4370, CA-SDI-4371, CA-SDI-4558, CA-SDI-5639, CA-SDI-5640, CA-SDI-9253, CA-SDI-9822, CA-SDI-10747H, CA-SDI-17264, CA-SDI-17265, and one mapped location for a historic structure on the 1901 USGS map. The sites include: five bedrock milling stations (CA-SDI-4370, CA-SDI-4371, CA-SDI-5639, CA-SDI-5640, and CA-SDI-17265); two habitation sites (CA-SDI-4558 and CA-SDI-9822); one temporary camp (CA-SDI-9253); one historic (CA-SDI-10747H); and one lithic scatter (CA-SDI-17264). The five bedrock milling stations are primarily individual granitic boulders with only one milling element, which in most cases were not relocated and appear to have been destroyed by previous development.

Sites CA-SDI-4558 and CA-SDI-9822 have both been identified as significant under CEQA and County RPO criteria. Site CA-SDI-4558 was originally recorded by Kearns (1971) for the Interstate 15 project (Cupples 1977). Kearns (1971) described the site as an occupation site consisting of metates, manos, flakes, and core and cobble tools. Cook (1977) updated the site during the test program for CA-SDI-4558 (Cook et al. 1977). A total of 35 1×1 m units were excavated, producing large bifaces (San Dieguito and Elko), manos, battered implements, debitage, and marine shell. In addition, two possible hearth features were excavated during the test program. Site CA-SDI-9822 was identified as significant and was recommended as eligible to the National Register of Historic Places in 1977 (White 2005). Given this previous determination, site CA-SDI-9822 is identified as significant under CEQA and the County RPO. It should be noted that the cement foundations were not recommended as significant resources, as these structure foundations are less than 50 years old.

Site CA-SDI-9822 (W-223-A) was originally recorded by Rogers (n.d.) as a habitation site, with flakes, mano fragments, a large amount of shell, and bedrock milling features. Site CA-SDI-9822 was updated by Hedges (1977), and a heavily weathered and exfoliated red pictograph feature was identified on a rock face situated in the northwest portion of the site. In 1990, site CA-SDI-9822 was again updated by Crull (1990). Palomar College conducted a field school from 1980 to 1989 that was under the direction of Dennis O'Neil, PhD. Approximately 40 1×2 m units, with an average depth of 120 cm, were excavated and as a result, an extensive collection of over 80,000 primarily Late Period artifacts, including arrow points, pottery, ceramic pipe fragments, bone tools, milling tools, beads (bone, shell, stone, and glass), arrow shaft straighteners, stone tools for cutting, chopping, and scraping, obsidian, shell, bone, and human bone from cremations were recovered. It should be noted that the only written report on this site is the MA thesis on the deer bone assemblage by Quintero (1987). As part of the present study, the 12 bedrock milling features were GPS mapped, recorded, and photographed. The southern portion of the site has been impacted by the construction of Deer Springs Road and a trailer park south of Deer Springs Road; however, the site does continue south of Deer Springs road, as evidenced by positive shovel test pits excavated within the County's easement.

Native American Consultation

The Native American Heritage Commission (NAHC) was contacted to request information and/or input regarding Native American concerns either directly or indirectly associated with the Merriam Mountains project, as well as names of individuals in the area who should be contacted prior to completion of this study. Those individuals identified by the NAHC were contacted by letter, and information as to cultural resources within the project area was requested (Appendix H, Technical Report). All Open Space planning, including use of cultural resources for public interpretation, and/or capping and protection will be discussed with Native Americans.

3.0 GOALS, OBJECTIVES, AND POLICIES OF THE RMP

This section identifies the overall goal of the RMP along with objectives and policies to address protection and management of RMP focus resources – biological resources, scenic/landform resources, and cultural resources.

To be effective, the RMP establishes a single, overriding goal and identifies tangible objectives that will serve as discrete steps toward achieving that goal.

The primary long-term goal of the RMP is to establish a permanent preserve system (Biological Open Space) that will adequately conserve biological resources, scenic/landform resources and

cultural resources within the Merriam site. *Section 3.2* of this RMP focuses on biological resources, *Section 3.3* focuses on scenic/landform resources, and *Section 3.4* focuses on cultural resources.

3.1 RMP Goal

The goal of the RMP is to establish a 1,192-acre Biological Open Space, to provide guidance for the open space areas outside of the Biological Open Space, protect significant cultural resources, and protect scenic/landform. The RMP will be dedicated to the protection, enhancement and management of the biological, scenic/landform and cultural resources of the Merriam Mountains Specific Plan area, consistent with the County's draft NCMSCP goals and serving as the functional equivalent of the County of San Diego Resource Protection Ordinance (RPO).

The RMP is the guiding document for protection, enhancement, and management of the biological, scenic/landform, and cultural resources of the Merriam Mountains Specific Plan area and serves as the functional equivalent of RPO for the Merriam Mountains project. The RMP sets forth the requirements for establishment of a 1,192 acre Biological Open Space within the project site and also describes the requirements for preservation, creation, and enhancement of off-site biological resources to compensate for impacts to biological resources associated with project implementation. RPO biological resources addressed in the RMP include sensitive habitat lands and RPO wetlands. Other RPO resources affected by the project include steep slope lands and RPO significant cultural resource sites. No RPO floodplains are present on site.

The RMP addresses preservation and management requirements for the RPO resources affected by the project. *Table 1* summarizes the management approach for RPO resources protected by the RMP including the location where preservation would occur and the responsibility for long-term management of RPO resources. Preservation of all on-site and off-site RPO resources identified for protection is the responsibility of the project applicant. Likewise, creation and enhancement of biological resources as required for CEQA mitigation, including monitoring and management until success criteria are met, is the responsibility of the project applicant. Long-term management responsibilities are noted in *Table 1*.

TABLE 1
Management Approach

RPO Resource	Activity	Location			Responsibility	
		On-Site Biological Open Space	On-Site Open Space/Fuel Treatment Easement	Off Site	Habitat Manager	Project Applicant or Designee
Sensitive Habitat Lands	Manage preserved sensitive upland habitats (CSS, SMX, NNG, CLOW)	X			X	
	Manage preserved Captain's Associates parcel (CSS and CAGN)			X	X	
	Manage lands created and enhanced in accordance with the project's Revegetation Plans for sensitive upland habitats (CSS, NNG, CLOW)	X		X[1]		X
Wetlands	Manage preserved wetlands (FWM, ORF, MFS, SWS, SWS/TS)	X			X	
	Manage lands created and enhanced in accordance with the project's Revegetation Plans for willow scrub wetlands	X				X
	Manage lands created and enhanced in accordance with the project's Revegetation Plans for oak riparian forest			X[1]		X
Steep Slope Lands	Retain preserved RPO steep slopes in accordance with easements	X	X			X[2]
Significant Historic And Pre-Historic Sites	Manage preserved RPO significant site CA-SDI-4558 in accordance with easement.		X			X
	Manage preserved RPO significant Site CA-SDi-9822 in accordance with easement.		X	X[3]		X

1 Off-site location to be determined.
2 Assure avoidance of impact during grading. No further management required.
3 Portion of site within Deer Springs Road ROW.

3.2 Biological Resources Objectives and Policies

Merriam Biological Open Space Area

Objective B.1 – Include large blocks of key biological resource areas within the Merriam Biological Open Space.

Policy 1.1 – Configure the Merriam Biological Open Space as identified in the "hardline exhibit" (see *Figure 9*) attached to the October 2005 Points of Agreement executed between NNP-Stonegate Merriam, LLC and the Wildlife Agencies and included as *Appendix A* to this RMP.

Policy 1.2 – Include within the Merriam Biological Open Space 1,192 acres of natural habitat including about 1,091 acres of Southern Mixed Chaparral, 57 acres of Mafic Chaparral and about 26 acres of other natural habitats; detailed information regarding biological resources within the Merriam Biological Open Space is included in the Merriam Biological Technical Report (PSBS, April 2007), included as Appendix G to the Merriam Mountains EIR.

Policy 1.3 – Include within the Merriam Biological Open Space representative populations of the following sensitive plant and animal species observed on site – summer-holly, Engelmann oak, and red diamond rattlesnake.

Policy 1.4 – Include within the Merriam Biological Open Space existing dirt trails and canyon bottoms in the northern portion of the site currently used by wildlife for movement across the site (*Figure 10, Wetlands and Uplands Revegetation Area*).

Policy 1.5 – Include within the Merriam Biological Open Space the on-site portion of the north/south trending tributary to Gopher Canyon along Twin Oaks Valley Road, providing linkage opportunities to the San Marcos Mountains to the west.

Objective B.2 – Enhance and restore sensitive resources within the Merriam Biological Open Space.

Policy 2.1 – Maintain wetlands creation area within the Merriam Biological Open Space through identifying wetland areas within the Biological Open Space Preserve with a high potential for habitat restoration. The quantity and type of habitat to be

restored shall be based on the mitigation requirements as discussed in detail in the Conceptual Uplands and Wetlands Revegetation Plan (Appendix X to the EIR).

Policy 2.2 – Maintain County/ ACOE/CDFG wetlands within the Merriam Biological Open Space.

Policy 2.3 – A portion of the enhancement acreage requirement may be satisfied by purchase of credits in an off-site mitigation area acceptable to the County of San Diego as detailed in the Conceptual Revegetation Plan prepared for the project.

Policy 2.4 – Conceptual restoration plans have been prepared and are included as Appendix X to the EIR and shall be approved by the County of San Diego in accordance with County requirements.

Objective B.3 – Provide resource management for the off-site mitigation area.

Policy 3.1 – Provide mitigation for impacts to coastal sage scrub and the California gnatcatcher consistent with the October 2005 Points of Agreement between NNP-Stonegate Merriam, LLC and the Wildlife Agencies included in *Appendix A* to this RMP.

Policy 3.2 – Acquire the 32-acre Captain's Associates property (see *Figures 11, 12, 13*). The characteristics of the Captain's Associates property are summarized in an April 6, 2005, letter from Dudek to Stonegate, included in *Appendix C* to this RMP.

Policy 3.3 – The Captain's Associates property will be incorporated in the County's North County MSCP preserve system and will be protected and managed consistent with management regimes established by the County as part of the draft North County MSCP.

Objective B-4 – Manage biological resources within the Merriam Biological Open Space.

Policy 4.1 – Identify a Habitat Manager for the Biological Open Space Preserve and Captain Associate Parcel acceptable to County. The Habitat Manager shall be identified and approved by the County prior to issuance of any project grading or construction permits. The selection of the Habitat Manager shall be contingent on

demonstrated habitat management skills meeting the following minimum qualifications/capabilities:

- Possess a minimum educational degree of BS or BA in wildlife management, natural resources, ecology, zoology, botany, biology, or other applicable scientific field.
- Documented field experience equivalent to a minimum of 2 years within San Diego County
- Documented resource management experience equivalent to a minimum of 2 years.
- Demonstrated skills including (1) effective interaction with local and regional conservation agencies, recreational agencies, and community groups; (2) supervision of individuals involved in scientific research (3) coordination of multiple scientific monitoring tasks, including habitat assessment and sensitive plant and animal surveys; and (4) effective management of personnel and finances over a long term.

Policy 4.2 – The Habitat Manager's primary responsibility will be to maintain the integrity of the preserved habitats. In order to fulfill that responsibility, the Habitat Manager shall (1) Be an advocate of the Merriam Biological Preserve area and its protection, (2) Be familiar with this RMP, its appendices, and supporting documentation, (3) Be responsible for all points noted in this Resource Management Plan, (4) Maintain all documents transferred by NNP-Stonegate Merriam, LLC (as noted above) and be knowledgeable of the resources and their locations addressed in these reports, (5) Educate the surrounding community about the presence and need for the Merriam Biological Preserve area; be responsive to any community concerns or problems regarding the Merriam Biological Open Space Preserve area, (6) Coordinate with the Habitat Managers and/or landscape managers of adjacent properties on management practices and tasks related to preservation and maintenance of the subregional open space system. Specifically, this will include activities such as removal of exotic and pest species, and ensuring compatibility with the overall RMP to be prepared by the County of San Diego as a part of the North County Multiple Habitat Conservation Program, yet to be finalized.

- Establish baseline conditions based on the following:

- The quantity and quality of the habitat types present within the Merriam Biological Open Space area will be documented during the first year of active management. A copy of the baseline inventory shall be included in the first annual report to be submitted to the County Merriam Biological Open Space Administrator. This information will be used as a baseline, or starting point, to measure changes in habitat resulting from both natural and man-made causes as well as to evaluate the success of the management effort in following years. The baseline inventory will be conducted once, during the first year of active management. The Habitat Manager will also use baseline maps in discussions with individuals or agency personnel involved in habitat management.

  A vegetation map showing current conditions will be produced for the project area (in digital format). Based on this mapping, a table listing the total acreage of all existing habitat types will be produced. A field inspection will be used to list all observed species within each identified habitat type. Additionally, a complete list of all species observed (either directly or indirectly by sign [e.g., scat, tracks, etc.]) during the field inspection also shall be produced. The locations of any sensitive plant or animal species will be noted on the vegetation map.

- Monitor for changes in baseline conditions:

  - Develop and provide regular standardized surveys to determine habitat health and to evaluate plant and animal species of interest.

  - Sensitive species populations and their habitat should be assessed regularly, with focused surveys being done at least once every three years. Surveys for the sensitive species will be conducted at the appropriate time of the year for each species. Methods will vary based on the target species but will include (1) the use of specific survey surveys by USFWS permitted biologists, (2) predetermined monitoring locations, (3) specific data collection and reporting (CNDDB), and (4) other standard analysis techniques.

  - In each assessment, the Habitat Manager should verify the Merriam Biological Open Space area's sensitive species locations and conditions.

- The Habitat Manager shall monitor the health of the habitat for the sensitive species that have been previously observed on site (Cooper's hawk, San Diego horned lizard, northern red-diamond rattlesnake, Belding's orange-throated whiptail, and coastal western whiptail). Other sensitive species that have the potential to occur on the site should also be considered in determining habitat health.

- Focused surveys for the coastal California gnatcatcher will be performed every 3 years at the Captain's Associates Parcel after the initial survey. No focused surveys in Biological Open Space would occur because no gnatcatcher are expected to be present; however, the Habitat Manager will record anecdotal observations if any occur during regular monitoring of the Biological Open Space. These surveys should include three site visits utilizing the current protocol accepted by the USFWS and/or CDFG and can coincide with other site assessments. Surveys should be conducted in April, May, and early June.

- During the first year, all plant and animal species observed should be recorded. In subsequent years, all sensitive species should be recorded and included in the annual report.

- At least one of the monthly visits should also include a nocturnal visit to search for owls, amphibians, and mammals that may not otherwise be observed during the normal diurnal activity cycle.

- Monthly site visits in November and December should attempt to identify winter species using the property.

- Perform regular site visits to the Captain's Associates Parcel on a regular basis to perform site assessments to insure that the site is maintained in a natural condition. Specific issues shall include inspection checking for illegal/unauthorized activities, dumping, over-use of trails, significant changes in weedy or exotic species, and other activities that could significantly impact the biological values of the Captain's Associates Parcel.

- Visit the site monthly to determine if management or stewardship activities are necessary (this may be combined with other activities)

- Schedule and be present, as necessary, for removal of non-native invasive species
- Schedule and be present, as necessary, for removal of trash and debris
- Schedule and be present, as necessary, for fencing repairs
- Schedule and be present, as necessary, for fuel load thinning.

- During inspections and as necessary after severe storms, fires, floods or other significant disturbance events, the Habitat Manager shall identify areas of moderate to severe erosion within and adjacent to the Biological Open Space.

- Apply adaptive management principles to RMP tasks every year.

- Provide an annual report summarizing the status of the Merriam Biological Open Space area on site, the results of the annual surveys and all major actions taken since the previous assessment will be provided to the County each year.
  - This letter report will include information on the overall health of the various habitats present within the Merriam Biological Open Space area, any changes to the health or distribution of sensitive plant and animal species observed (provided on a map), any observed changes resulting from natural or man-made causes, any management issues/tasks addressed during the previous year, and tasks identified for the next year.
  - Locations of exotic species should be mapped, and measures undertaken to remove exotic species during the prior year should be summarized.
  - The effectiveness of those measures should be assessed, and planned management measures for the coming year should be spelled out. This report will also compare the most recent data with that collected in previous years.
  - If any habitat type or sensitive species is declining the report will outline a plan for its recovery.

- The annual report should include the current most up-to-date vegetation and sensitive species maps. These digital format maps will be updated per surveys conducted by the Habitat Manager.
- Copies of the annual report should be provided to the County, USFWS, and CDFG by the end of February each year.
- The income from the endowment and expenses incurred in performing site management should be included.

Policy 4.3 – Provide for dedication of the open space easement to the County of San Diego and the conveyance of lands to the Merriam Biological Open Space as described in *Section 4.0* of the RMP.

Policy 4.4 – Provide a budget for management activities as described in *Section 4.0* of the RMP and within the established funding mechanism.

Policy 4.5 – This RMP shall be updated every 5 years based on data collected during the annual reporting efforts. The update should review any changes in site conditions, management priorities, and adaptive management strategies. Additionally, management strategies may evolve, or the property could be reviewed within the context of ongoing regional planning efforts that may warrant revisions to the RMP.

Objective B-5 – Track changes in the physical and biological conditions in Biological Open Space to determine active management strategies.

Policy 5.1 – Provide regular site inspections, record and map any changes in the biological and physical environment of the Biological Open Space that may affect its biological integrity as discussed above in *Objective B-4*.

Policy 5.2 – The Biological Open Space area will be visually inspected for changes during regular maintenance and surveying activities. If substantial changes are noted, the area will be monitored more closely until it has been stabilized. The baseline vegetation and sensitive species maps will be updated every five years as noted in *Policy 4.5* above.

Policy 5.3 – As stated above in *Policy 4.2*, the Habitat Manager shall conduct at least monthly site assessments to insure that the site is maintained in a natural condition. Specific issues shall include inspection checking for illegal/ unauthorized activities, dumping, over-use of trails, significant changes in weedy or exotic species, and other activities that could significantly impact the biological values of the Merriam Biological Open Space area. These surveys may be included in sensitive species surveys of the site.

Policy 5.4 – The Habitat Manager will institute prudent and adequate protective measures if any individual species becomes threatened

Objective B-6 – Prevent habitat degradation.

Policy 6.1 – The following activities shall be prohibited in the Biological Open Space area: grading, placement of structures, grazing, dumping, vehicular activity (except as required for monitoring and management purposes), and vegetation removal (except for habitat enhancement as described in the RMP).

Policy 6.2 – Provide for various potentially adverse effects of human use within and adjacent to the Biological Open Space area by implementing the following;

Trash Removal. The Habitat Manager will be responsible for general removal of trash from the Merriam Biological Open Space area. Trash will be removed on an ongoing basis.

Squatting: Illegal squatting (including temporary residences or camping) is often a problem within open space areas in San Diego County. The Habitat Manager will regularly survey the site for encampments and report them to the County Sheriff or other appropriate County law enforcement official.

Hunting/Firearms: The purpose of the Habitat Management Plan area is to create a native habitat preserve. Hunting and use of firearms will not be permitted within the Merriam Biological Open Space area as they are counter-productive to the goals of the Merriam Biological Open Space. The Habitat Manager will post signage advising visitors of this policy and warning them of the potential legal consequences. The Habitat Manager shall inform, in a non-confrontational manner, anyone hunting or shooting within the Merriam Biological Open Space area that these activities are illegal. The Habitat Manager should maintain a log of

all incidences of hunting or the apparent use of firearms within the Merriam Biological Open Space area. Should a situation turn confrontational or if request to discontinue illegal activities are ignored, the Habitat Manager shall report the offender(s) to the Sheriff's Department, CDFG, and the USFWS.

Poaching/Collecting: Removal of any plant, animals, rocks, minerals or other natural resources will be prohibited within the Merriam Biological Open Space area. The Habitat Manager will post signage advising visitors of this policy and warning them to the potential legal consequences. Anyone found removing plants or animals will be informed, in a non-confrontational manner, that these activities are illegal. The Habitat Manager should maintain a log of all incidences of collecting within the Merriam Biological Open Space area. Should a situation turn confrontational or if requests to discontinue illegal activities are ignored, the Habitat Manager shall report the offender(s) to the Sheriff's Department, CDFG, and USFWS.

The Habitat Manager may, at his/her discretion, allow seed collection and plant cuttings to be used as part of revegetation efforts within the Merriam Biological Open Space area. Any such activities will take place under the direct supervision of the Habitat Manager. The amount of collected plant materials will be limited to provide only what is absolutely necessary to ensure successful revegetation on the Merriam Biological Open Space area.

Utilities: Occasional maintenance of existing utilities will be required within the Merriam Biological Open Space area. Prior to any such activity, the Habitat Manager will be consulted to formulate a means of completing necessary maintenance with a minimum of disturbance to the Merriam Biological Open Space area. It should be noted that service providers have existing facilities and easements located within the Biological Open Space, therefore access to these facilities may not be restricted by the Habitat Manager.

Lighting: Lighting within 100 feet of the Merriam Biological Open Space area edge shall be confined to areas necessary to insure public safety and shall be limited to low pressure sodium fixtures, shielded and directed away from the Biological Open Space area. The developer will be responsible for developing a lighting plan that meets these requirements.

Fencing: The project will provide fencing located along the interior southern of the Biological Open Space boundary if required. The fencing shall be maintained by the Habitat Manager in good working order.

Policy 6.3 – Plan Response for Habitat Degradation from Wildfires by implementing the following:

As necessary after fires or other significant disturbance events, the Habitat Manager shall identify areas of moderate to severe erosion within and adjacent to the Biological Open Space. The Habitat Manager shall determine the cause of the erosion and prepare an assessment of cost for implementation of erosion control measures. Most erosion control efforts in the interior of the Biological Open Space will be focused on detection of the formation of rills and gullies on slopes and dirt road surfaces, which generally signal increased surface runoff and at-risk surface soils.

The Habitat Manager may decide that revegetation is necessary if the burned or flood impacted area fails to recover or is taken over by invasive, exotic species. Following flooding events, the Habitat Manager will be responsible to remove any weedy non-native plants that may be introduced.

Objective B-7 – Control and remove invasive, exotic plant species.

Policy 7.1 – Exotic Plant Pest Species should be targeted for complete elimination from the Merriam Biological Open Space area. These include pampas grass (*Cortaderia selloana*), artichoke thistle (*Cynara cardunculus*), sweet fennel (*Foeniculum vulgare*), fountain grass (*Pennisetum setaceum*), acacia (*Acacia* sp.), iceplant (*Carpobrotus edulis*), castor-bean (*Ricinus communis*), myoporum (*Myoporum laetum*), Brazilian pepper tree (*Schinus terebinthifolius*), giant reed (*Arundo donax*), tree tobacco (*Nicotiana glauca*), and tamarisk (*Tamarix* sp.). Other species, as listed by the California Exotic Pest Plant Council List, should be evaluated for removal before they become established.

Policy 7.2 – Existing locations of eucalyptus or other exotic trees should be evaluated for their removal from the Merriam Biological Open Space area.

Established exotic trees that may be compatible with the Biological Open Space where they provide potential nest or perch sites for raptors. In most cases, young

exotic trees growing away from established groups should be removed. In general, removal will be accomplished by hand or mechanical means. The Habitat Manager will determine if/when herbicides are required to control invasive, exotic plant species. Permitting and compliance with all applicable and federal laws and regulations will be the responsibility of the Habitat Manager. Herbicides shall only be applied by licensed pesticide applicators. If herbicide application is deemed necessary, it should be kept to an absolute minimum and should follow these general guidelines:

- The applications should be minimized to the extent possible
- Herbicide application should occur when the application would be most effective on the target species
- Herbicide application should focus on the target species
- Temporary signs should be posted in the application areas warning of the use of herbicides.

Objective B-8 – Control and remove invasive, exotic animal species.

Policy 8.1 – All trash shall be removed from the Merriam Biological Open Space area by the Habitat Manager to deter the attraction of Argentine ants.

Policy 8.2 – Any unnecessary temporary or permanent irrigation should be minimized or eliminated to reduce the potential for invasion by Argentine ants. Additionally, employ measures to isolate potential Argentine ant access from adjacent irrigated developed or landscaped areas.

Policy 8.3 – Legal culling of exotic (non-native) species shall be conducted by the Habitat Manager with the approval of the County, CDFG, and USFWS. The Habitat Manager will be responsible for obtaining all required permits prior to initiating culling activities.

Policy 8.4 – The Habitat Manager will implement the following steps to control the effects of domestic pets on wildlife within the Habitat Management Plan area:

- The Habitat Manager will promote education of local residents regarding the impacts of uncontrolled pets on wildlife, through measures such as signage and periodic newsletters.

- The Habitat Manager will report persistent and chronic problems related to uncontrolled pets in the Merriam Biological Open Space area to the County of San Diego' designated Animal Control Officer.

Objective B-9 – Identify and provide for permitted uses within the Merriam Biological Open Space consistent with the overall goal of resource protection.

Policy 9.1 – Recreation uses shall be limited to trails, overlooks, and trailheads (see *Figure 14, Conceptual Trail Plan*, for conceptual locations); trails, overlooks, and trailheads extending into the Merriam Biological Open Space shall be designed as described in the Merriam Specific Plan (Chapter 8, Community Design Element). No other recreation uses shall be permitted within the Merriam Biological Open Space.

Policy 9.2 – The Habitat Manager will keep a regular schedule of trail monitoring. No vehicles will be allowed on the trails, other than those authorized by the Habitat Manager for maintenance activities and/or access for utilities maintenance. Posting of signs and inspecting for unauthorized trails will also be part of the long-term Merriam Biological Open Space maintenance/monitoring program. Signs shall also be posted along trail noting that dogs must be leashed while on trails.

Policy 9.3 – A specific trails plan will be included in the Merriam Mountain Biological Open Space and shall be designed as described in the Merriam Specific Plan (Chapter 8, Community Design Element). No additional trails are proposed in the Merriam Biological Open Space area. If the Habitat Manager or the County determines that an additional trail is necessary, a written proposal may be prepared. The proposal must indicate the need for the new trail and provide a description of the habitats and sensitive species that would be impacted. No trail may be created without first receiving the approval of the County, as well as input from the USFWS, and CDFG, if applicable.

Policy 9.4 – Two secondary access roads (Lawrence Welk Court and Camino Mayor [emergency access only]) occupying approximately 60 acres (including fuel management) shall be permitted within the Merriam Biological Open Space.

Policy 9.5 – Fuel management activities shall be permitted with in the Merriam Biological Open Space along the secondary access roads described in *Policy 5.2*, consistent with the Merriam Fire Management Plan included as Appendix K to the Merriam EIR.

Policy 9.6 – Two water tanks (North Tank and Coogan Tank) exist on separate parcels bounded by Biological Open Space. These two water tanks shall be permitted adjacent to the Merriam Biological Open Space and will not be managed by the Habitat Manager (see *Figure 2* for conceptual locations).

Objective B-10 – Determine the role of fire and fire suppression in managing the Biological Open Space.

Policy 10.1 – Small, controlled burns may be permitted within the Merriam Biological Open Space area with the explicit approval of the appropriate fire suppression district and the county of San Diego. The Habitat Manager will be responsible for all required permitting as well as informing the surrounding communities of the planned burn. Note that prescribed or controlled burns are not anticipated within the Merriam Biological Open Space area because of its small size and proximity to developed areas.

Policy 10.2 – The preferred method of habitat restoration in areas that have burned (prescribed or natural) is natural recovery. Burned areas will be allowed to regenerate, without human assistance. The Habitat Manager may decide that revegetation is necessary if the burned area fails to recover or is taken over by invasive, exotic species. The Habitat Manager may also install slope stabilization structures measure (e.g., hay bales, straw wattles, water bars) if erosion poses problems after a burn.

Objective B-11 – Maintain natural stream channel ecological functioning and correct or avoid impacts from flooding.

Policy 11.1 – In the event of a flood, the preferred method of habitat restoration in these areas is natural recovery. Additional restoration efforts will be required if natural

recovery is inadequate or the flood damage creates unstable or dangerous conditions (e.g., slope undercutting, etc.) that may endanger additional habitat and trail users. The Habitat Manager will revegetate habitat areas disturbed by flooding as needed. In addition, the Habitat Manager will survey for and remove exotic species introduced by flooding.

Objective B-12 – Protect Critical Biological Resources during Construction.

Policy 12.1 – Install temporary construction fencing in all locations of the project where proposed grading or clearing is within 100 feet of an open space easement boundary. The removal of temporary fencing is to occur only after all grading, clearing, and construction has been completed.

Policy 12.2 – If required by the County or Wildlife Agencies, install fencing acceptable to the County of San Diego along the entire interior southern boundary of the Biological Open Space and clearly mark the fence with high visibility markers (at 50-foot intervals) along the length of the fence to discourage entry into the natural area. This fencing shall also be placed in such a manner as to preclude all fuel modification activities from occurring in the Biological Open Space.

Policy 12.3 – Permanent signs must be posted every 100 feet along the permanent fence bordering the on-site Merriam Biological Open Space area. The signs must be corrosion resistant, no less than 3 feet above the ground surface, have the minimum dimension of 6" × 9", and must state the following:

"Sensitive Environmental Resources –
Disturbance beyond this Point is Restricted.

For Information Contact:
Department of Planning and Land Use, County of San Diego
Reference: SP04-006"

Policy 12.4 – Restrict all brushing, clearing and/or grading such that none will be allowed within 300 feet of Diegan Coastal Sage Scrub habitat during the breeding season of the Coastal California Gnatcatcher (*Polioptila californica californica*). This is defined as occurring from February 15 through August 30. The County Planning Division Director may waive this condition through concurrence from the USFWS and the CDFG that no Coastal California Gnatcatchers are present in the

vicinity of the brushing, clearing or grading, as determined by a pre-grading/pre-construction survey performed by a federally permitted Gnatcatcher biologist that shows no Gnatcatchers are present.

Policy 12.5 – Employ a County-listed biological consultant to monitor grading activities to ensure they do not impact additional areas of Diegan Coastal Sage Scrub designated as protected or other sensitive resources.

Objective B-13 – Establish and maintain public awareness and education programs to foster community support for the Resource Management Plan.

Policy 13.1 – The Habitat Manager will attend meetings of the local community (including any appropriate Home Owners' Associations) to inform them of the status of the habitat management program and to enlist their cooperation and support.

Policy 13.2 – Interpretive signage will be installed at a minimum of locations that will help educate users/neighbors of the Merriam area about the ecology of the area, purpose of the Merriam Biological Open Space area, common and/or sensitive species present, and need for preservation of the area. Other important information will be included, such as timing of herbicide treatments, rattlesnake warnings, what to do in case of emergency, and a telephone number to call with any suspected violations of open space/conservation easement limitations.

Objective B-14 – Identify and implement a funding mechanism to perform required monitoring and management activities.

Policy 14.1 – As discussed in *Section 4.4*, the Project Applicant will be responsible for all RMP funding requirements, including direct funds to the support the RMP "start-up" (i.e., first year) tasks as well as funding for long-term RMP implementation. Funding for each phase of the RMP shall be secured to the satisfaction of the County prior to recordation of the relevant final map.

Policy 14.2 – The Habitat Manager shall enter into an agreement with the County and, if appropriate, the Project Applicant, with respect to the maintenance and monitoring of the Merriam Biological Open Space Preserve prior to recordation of the first final map in the Project Area.

Policy 14.3 – The Project Applicant shall provide for funding of ongoing management of the Merriam Biological Open Space Preserve in perpetuity. This funding shall be adequate to fund all management activities based on a detailed cost estimate to be approved by the County

Objective B-15 – Convey Land in Managed Habitat Preserve to Permanent Land Owner/Manager.

Policy 15.1 – Conveyance of land within the Biological Open Space Preserve will be phased in accordance with the Biological Open Space Conveyance Plan (see *Figure 15*). The land will either be conveyed in fee or by an open space/conservation easement acceptable to the County. At the request of DPLU, a secondary conservation easement over the Preserve may be granted to the County.

Policy 15.2 – The Project Applicant shall insure that the Biological Open Space Preserve is conveyed to an entity ("Conservancy") acceptable to the Director, County DPLU and the Wildlife Agencies within 60 days of recordation of the relevant phase of the final map. The County shall be named as a beneficiary to funding mechanism should the Conservancy fail to perform in accordance with this RMP. The Conservancy and the Habitat Manager may be the same entity.

A signed Agreement among the Applicant, the County, the Conservancy and the Habitat Manager, if they are different entities, shall be recorded in the Office of the County Recorder, whereby all parties agree to implement the RMP, which includes a financing mechanism that provides funding adequate to pay the costs of all RMP management activities. The amount of funding shall be based upon a DPLU-approved Property Assessment Record (PAR) or equivalent estimate. The Agreement shall provide for the funding to transfer to the County in the event of the failure of the Habitat Manager to perform. The Agreement shall also provide that, prior to the issuance of a Grading Permit within the Project, and prior to commencement of grading, the Applicant shall demonstrate that all RMP funding has been provided or the funding mechanism established. The Agreement shall also provide for creation and maintenance of an annual DPLU account of $2,000 for review of annual reports and for contingency funds.

Policy 15.3 – The Project Applicant shall perform the following tasks prior to transferring any open space to the Conservancy: (1) pay all transfer, closing, and recording costs; (2) complete an initial clean-up of the property (removing trash and any

other items to turn the property over in good condition); (3) ensure that all permanent gates and fences required by the County for access control are in place and in good working order; and (4) supply the Habitat Manager with copies of all reports prepared for the project area, as appropriate (i.e., reports containing data regarding sensitive resource locations). The initial clean-up activities shall be done in a manner that does not adversely affect open space vegetation. Gates and fencing shall allow for wildlife movement and restrict access to the conserved land for off-road vehicles.

3.3 Scenic/Landform Resources Objectives and Policies

Objective L.1 – Identify steep slopes on the Merriam Project site.

Policy 3.3-1 – Include within the Merriam Biological Open Space and Other Open Space all on-site RPO Significant Steep Slopes (see *Figure 8, Significant and Insignificant Steep Slopes*) and manage these slopes as a scenic resource under this Resource Management Plan.

Objective L.2 – Design the project to minimize impacts to steep slopes.

Policy 3.3-2a – Include within the Merriam Mountains a Biological Open Space, 405 acres of RPO steep slope lands, 465 acres of slopes with gradients in excess of 25% but not meeting the definition of RPO steep slopes, and 322 acres of lands with gradients less than 25%, thus maintaining the integrity of the varied landforms on the Merriam site.

Policy 3.3-2b – Do not impact any unique topographic feature or ridgeline. The slopes located within the Biological Open Space preserve shall not be graded and left as open space.

Objective L.3 – Include within the Merriam Biological Open Space and Other Open Space the following key landform features (see *Figures 4, 5,* and *6* for locations) – Twin Peaks, Lusardi Mountain, Merriam Mountain, Crown of Rocks, Merriam Valley, South Fork Gopher Canyon, Abandoned Landing Strip, Abandoned Quarry.

Objective L.4 – Maintain scenic views of the Merriam Mountains from I-15 consistent with the County's I-15 overlay and the B Special Area Designator incorporated in the Merriam Mountains Specific Plan.

Objective L.4 – Ensure preservation of the integrity of important landforms and scenic resources by limiting permitted uses within the Merriam Biological Open Space and providing for management as described in *Section 3.2* of the RMP.

3.4 Cultural Resources Objectives and Policies

The goal of this section of the RMP is both long-term preservation and public interpretation of the cultural resources.

Objective C.1 – Long-term site management.

Goal: Long-term management programs are necessary for the protection of portions of significant sites CA-SDI-4558 and CA-SDI-9822 within Biological Open Space. Signs can educate the public and the surrounding community regarding the history and significance of the sites, and warn of legal protection and penalties for site damage. Site stewardship programs can reinforce site protection through public participation and neighborhood watch. These types of programs also provide a shared community interest in archaeology through neighborhood involvement and education in archaeological activities.

Objective C.2 – Track Changes to the Cultural Resources and the Environmental Setting to Determine Active Management Strategies.

Policy 2.1 – Over time, evaluate the status of significant cultural resources and institute remedial measures if any site damage is identified. Status evaluations will be completed by cultural resources professionals having qualifications/capabilities as listed below.

- Possess a minimum educational degree of BS or BA degree or membership in the Society of Professional Archaeologists/Register of Professional Archeologists, and/or meet the Secretary of the Interiors requirements for qualification as archaeologist and principal investigators.

- Experience in the fields of archaeology, history, and paleontology, including special emphasis in Southern California prehistory.

- Included on the San Diego County CEQA Consultant List of Qualified Archaeologists.

Policy 2.2 – The cultural resources professional(s) will report annually on the status of significant sites (CA-SDI-4588 and CA-SDI-9822) and the results of site visits. Site visits will be conducted quarterly or as needed recognizing that the preserved sites will be capped, have limited access and generally not substantially threatened by human disturbance. Reporting will include information on the status of cultural resources; any changes to the site environment as a result of natural causes (erosion, flooding and inundation, weathering, bioturbation, fire, landslide) or man-made causes (looting, theft, vandalism, off-road vehicle activity); updates on previous management issues from previous site visits; and, any recommendations for the next year. Any site damage or potential site damage will be mapped and photographed. Copies of the annual report will be provided to the County and the South Coastal Information Center (SCIC), San Diego State University.

Objective C-3 – Prevent site damage.

Policy 3.1 – The following activities shall be prohibited in the open space designated for sites CA-SDI-4588 and CA-SDI-9822: construction of homes and buildings, grading, surface mining activities, industrial uses, trash dumping, commercial use, placement of public utilities, and soil removal (except for archaeological index excavation).

Objective C-4 – Determine the role of fire and fire suppression in managing the cultural resources.

Goal: Impacts as a result of fire include not only fire damage, but also staging of heavy equipment, grading of fire breaks, and air dropping of chemical fire suppressants. Impacts can also occur as a result of post-fire activities, such as grading, revegetation, and stabilization of slopes. Protection of cultural resources shall be considered in fire protection plans for the project.

Policy 4.1 – Staging areas for fire-fighting and suppression shall not be located in the significant cultural resource sites/open space easement areas.

Policy 4.2 – Post-fire, a cultural resources professional(s) will evaluate damage that may have occurred to cultural resources as a result of fire or fire fighting and update the present status of cultural resources. A field visit will be conducted to identify additional cultural resources that may have been exposed as a result of fire. If appropriate based on the evaluation, the results of the post-fire cultural resources evaluation will be documented in a report (State of California cultural resources report format) and submitted to the County, and the local State of California Information Center (South Coastal Information Center, San Diego State University). If a resource is damaged as a result of fire, or as a result of fire-fighting activities, then mitigation of impacts may be necessary. Mitigation may include site excavation and artifact analysis, and/or site stabilization.

Objective C-5 – Control human effects to significant cultural resources.

Policy 5.1 – Control potentially adverse effects of human use within and adjacent to the cultural resources by implementing the following.

Trash Removal: Trash will be removed on an ongoing basis using non-mechanical methods.

Off-Road Recreation Use: The use of off-road recreation vehicles (i.e., dirt bikes) within or adjacent to cultural resource site areas/open space is prohibited. The significant cultural resource site areas will be posted advising visitors of this policy and warning them of the potential legal consequences.

Collecting: Removal of any artifacts at any cultural resource site is prohibited. The significant cultural resource site areas will be posted advising visitors of this policy and warning them to the potential legal consequences. Anyone found looting (removing artifacts or excavating) at the site will be informed, in a non-confrontational manner, that these activities are illegal.

Utilities: Utilities will be placed either outside of the archaeological sites or within the fill soil.

Objective C-6 – Site interpretation and site stewardship: Voluntary efforts toward site interpretation and site stewardship will be encouraged.

Policy 6.1 – Interpretation of a cultural resource site is important as it can provide the public with the significance and importance of the site. This in turn can result in protection and support of the surrounding community. Signs that will educate the public about the history and significance of the site and provide warnings of the legal protection and penalties will help protect the sites. Interpretative signs will also provide important community interest in archaeology through neighborhood involvement and education in archaeological activities.

Policy 6.2 – Archaeological site protection cannot be accomplished effectively by regulation alone. Non-conventional techniques are important for protecting cultural resource sites. In addition to helping to protect cultural resources, voluntary stewardship programs help create a sense of community responsibility and pride in the community's archaeological and cultural heritage. Moreover, voluntary stewardship programs educate the community regarding the importance of site preservation.

Objective C-7 – Identify and implement a funding mechanism to perform required cultural resources long-term management activities.

Policy 8.1 – Funding for cultural resources management will be ensured by the Project Applicant. Funding assurance will be demonstrated to the satisfaction of the Director of DPLU prior to recordation of the first final map within the project.

Policy 8.2 – The Project Applicant shall provide funding necessary to provide for ongoing management of the Merriam significant cultural resources sites in perpetuity.

4.0 IMPLEMENTATION GUIDELINES

4.1 Administration

The Project Applicant will contract with a non-profit entity acceptable to the County DPLU to serve as Habitat Manager, which will coordinate implementation of this RMP with the County. The following organizations and individuals will be involved in the implementation of this RMP:

- The Director, County DPLU will approve the final version of the RMP to be implemented by the Habitat Manager. The County may transfer responsibility from DPLU to a different department, such as the Department of Parks and Recreation, if deemed appropriate.

- The Habitat Manager will be responsible for implementing the RMP, and will carry out the associated requirements and objectives. Technical assistance may be solicited from regulatory agencies or private consultants, and labor assistance may be solicited from community volunteer groups or private companies.

- The Project Applicant will be responsible for funding the implementation of the RMP, including "start-up" (i.e., first year) costs and management/maintenance of the Biological Open Space in perpetuity. Funding mechanisms will include direct funding of start-up tasks and long-term RMP implementation.

- The Habitat Manager will work in conjunction with the Fire District on issues such as brush management and emergency access.

- DPLU and the Project Applicant will jointly approve the selection of a Habitat Conservancy Manager per the qualifications included in *Objective B-4* above.

4.2 Management Responsibility

The Project Applicant will complete the following actions under the direction of the County and/or the Habitat Manager, depending on the timing of the events:

- Complete all project-specific mitigation measures including habitat restoration per the requirements included in the Conceptual Uplands and Wetlands Revegetation Plans (Appendix X to the EIR) within the Biological Open Space and off-site mitigation prior to conveyance of the Biological Open Space Preserve to the Conservancy.

- Provide adequate funding to support the RMP "start-up" tasks and long-term implementation.

- Contract with DPLU-approved Habitat Manager.

- Supply the Habitat Manager with all necessary reports and maps prepared for the project area.

- Convey all proposed Biological Open Space areas to the Conservancy through a conservation easement and/or on fee title.

4.3 Biological Open Space Conveyance

The Merriam Biological Open Space Preserve shall be protected in a manner consistent with the phasing of development within the Merriam Mountains Specific Plan (see *Figure 15*, *Biological Preserve Conveyance Plan* and *Figure 16, Project Development Phasing*).
Conveyance shall be as follows:

Development Phase 1 (Neighborhood 1):	Open Space Lots 2 and 3
Development Phase 2 (Neighborhood 2):	Open Space Lot 16
Development Phase 3 (Neighborhood 3):	Open Space Lot 5
Development Phase 4 (Neighborhood 4):	Open Space Lot 7
Development Phase 5 (Neighborhood 5):	Open Space Lots 6, 8 and 15
Estate Lots:	Open Space Lot 4

Offers to convey easements or fee titles shall be recorded concurrent with recordation of the first Final Map within each phase of development as shown in *Table 2* below.

TABLE 2
Merriam Biological Open Space Preserve Conveyance Plan (acres)

Open Space No.	Neighborhood	Development Area	Non-Bio Open Space	Impact Acre	Bio Preserve
OS-2 & OS-3	1	121.0	197.2	318.2	333.5
OS-16	2	65.7	175.4	241.1	252.8
OS-5	3	58.3	56.1	114.4	120.4
OS-7	4	92.6	0	92.6	97.7
OS-6,8,15	5	147.0	163.0	310.0	325.6
OS-4	Estate Lots	53.4	5.3	58.7	62.0
Total		**538.0**	**597.0**	**1,135.0**	**1,192.0**

4.4 Preserve Funding

The Project Applicant will be responsible for all RMP funding requirements, including direct funds to the support the RMP "start-up" (i.e., first year) tasks as well as long-term RMP implementation. Start-up tasks include fence construction and initiation of activities including

public awareness programs. Long-term tasks involve management and maintenance of the Biological Open Space Preserve in perpetuity, including habitat monitoring/mapping, exotic species control and general monitoring and reporting. The Habitat Manager will commence these habitat management tasks immediately upon conveyance of the open space or upon completion of the restoration plan for the areas that will be created or enhanced, whichever occurs first. The Project Applicant shall be responsible for funding any required RMP implementation until prior to conveyance of the Biological Open Space Preserve and for completion of the restoration plans. A Conceptual Property Analysis Record (PAR) report has been prepared based on the requirements of the RMP and is included as *Appendix D* to this document. Initial costs are projected to be about $175,000 and annual operating costs are projected to be about $53,000/year.

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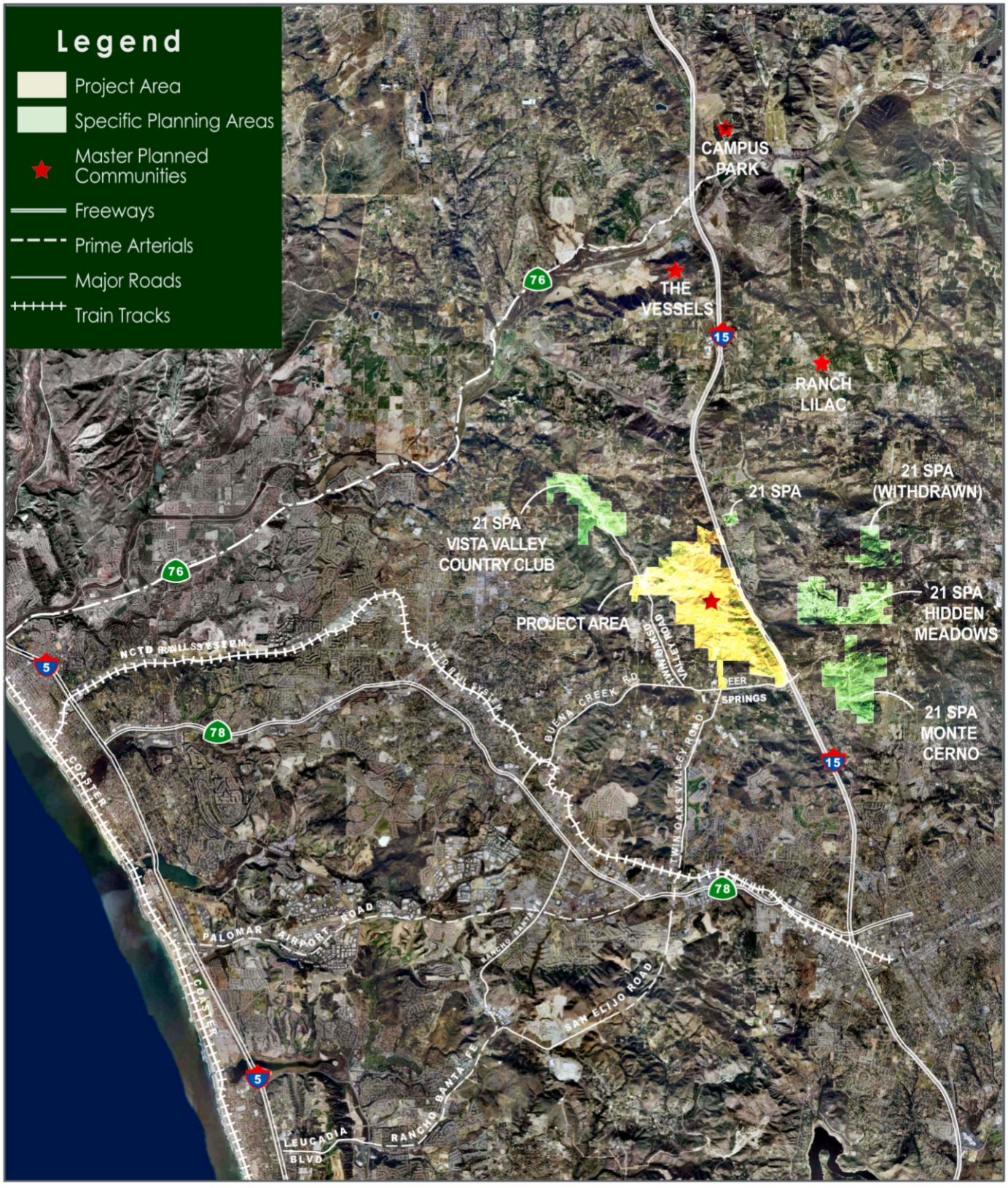
http://www.sandiego.gov/planning/mscp/index.shtml

San Diego, County of. 2007. Department of Planning and Land Use. San Diego County Code, Section 86.601 et seq. Resource Protection Ordinance.

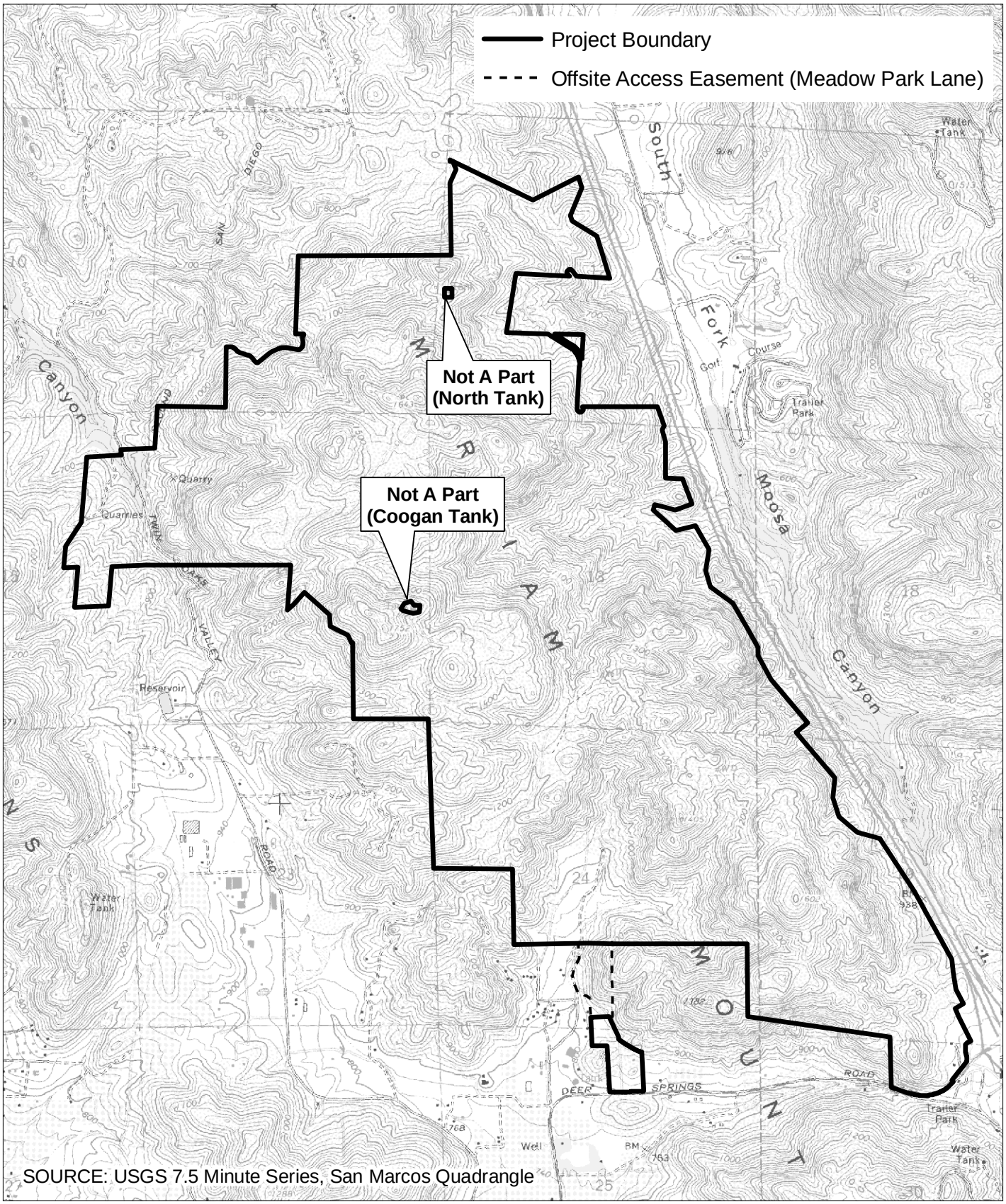


Regional Map

FIGURE 1

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

N



Vicinity Map

FIGURE 2

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

0 1,200 2,400 4,800
Feet

N

Legend

- Project Boundary
- Offsite Access Easement (Meadow Park Lane)
- Development Areas
- Offsite Deer Springs Road Impact Area
- County Wetlands (Code: 13200) ACOE/CDFG/RWQCB Unvegetated Waters of the U.S.
- County Wetlands (Code: 13200) CDFG Unvegetated Waters of the State
- ACOE/CDFG/RWQCB Unvegetated Waters of the U.S.
- CDFG only Unvegetated Waters of the State

County/ACOE/CDFG/RWQCB Wetlands

- FWM:Freshwater Marsh (Code: 52410)

County/CDFG Wetlands

- Mule Fat Scrub (Code: 63310)
- Coast Live Oak Woodland (Code: 71160) Associated with Stream Course
- Southern Coast Live Oak Riparian Forest (Code: 61310)
- Southern Willow Scrub (Code: 63320)
- Southern Willow Scrub/Mule Fat Scrub (Code: 63300)
- Southern Willow Scrub/Tamarisk Scrub (Code: 63320)
- Sycamore Alluvial Woodland (Code: 62100)

Upland Vegetation Types/Landcovers:

- Coast Live Oak Woodland (Code: 71160)
- Diegan Coastal Sage Scrub (Code: 32500)
- Non-Native Grassland (Code: 42200)
- Southern Mixed Chaparral (Granitic) (Code: 37121)
- Mafic Southern Mixed Chaparral (Code: 37122)

Vegetation Categories that are not Sensitive Habitat:

- Disturbed Habitat (Code: 11300)
- Eucalpytus Woodland (Code: 11100)
- Intensive Agriculture (Code: 18200)
- Orchard or Vineyard (Code: 18100)
- Urban/Developed (Code: 12000)

Sensitive Species

C	Comarostaphylis diversifolia ssp diversifolia
H	Horkelia truncata
Q	Quercus engelmannii
S	Salvia clevelandii
CAGN	California Gnatcatcher
RDRA	Red Diamond Rattlesnake

See Figure 3A-1 through 3 for Offsite Deer Springs Road Wetlands and Uplands Mapping

County Wetlands/Vegetation & Species Data Source: Pacific Southwest Biological Services, Inc.

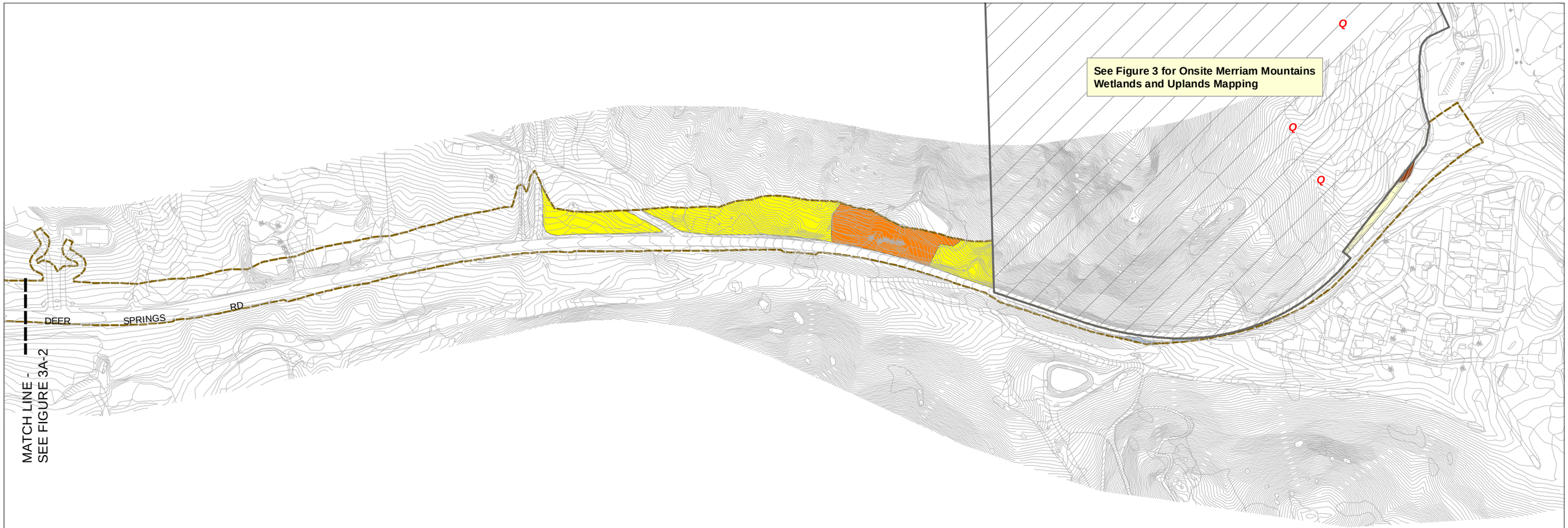
Biological Resources Map - Onsite

FIGURE 3

MERRIAM MOUNTAINS SPECIFIC PLAN RESOURCE MANAGEMENT PLAN

0 0.125 0.25 0.5 Miles

N



Legend

- Offsite Deer Springs Road Impact Area
- Onsite Development Areas
- Project Boundary

Sensitive Species

Q — Quercus engelmannii

County/CDFG Wetlands

- Coast Live Oak Woodland Associated with Stream Course (Code: 71160)

County Wetlands

- ACOE/CDFG/RWQCB Unvegetated Waters of the U.S.

Upland Vegetation Types/Landcovers:

- Coast Live Oak Woodland (Code: 71160)
- Non-Native Grassland (Code: 42200)
- Southern Mixed Chaparral (Granitic) (Code: 37121)
- Coastal Sage-Chaparral Scrub (Code: 37920)
- Coastal Sage-Chaparral Scrub (disturbed) (Code: 37920)

Vegetation Categories that are not Sensitive Habitat:

- Disturbed Habitat (Code: 11300)
- Eucalpytus Woodland (Code: 11100)
- Orchard or Vineyard (Code: 18100)
- General Agriculture (Code: 18000)
- Urban/Developed (Code: 12000)

County Wetlands/Vegetation & Species Data Source: Pacific Southwest Biological Services, Inc.

Biological Resources Map - Offsite Deer Springs Road Impact Area

FIGURE 3A-1

MERRIAM MOUNTAINS SPECIFIC PLAN RESOURCE MANAGEMENT PLAN

0 75 150 300
Feet

N

Legend

- Offsite Deer Springs Road Impact Area
- Onsite Development Areas
- Project Boundary

County/CDFG Wetlands

- Coast Live Oak Woodland Associated with Stream Course (Code: 71160)

County Wetlands

- ACOE/CDFG/RWQCB Unvegetated Waters of the U.S.

Upland Vegetation Types/Landcovers:

- Coast Live Oak Woodland (Code: 71160)
- Non-Native Grassland (Code: 42200)
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- Coastal Sage-Chaparral Scrub (disturbed) (Code: 37920)

Vegetation Categories that are not Sensitive Habitat:

- Disturbed Habitat (Code: 11300)
- Eucalpytus Woodland (Code: 11100)
- Orchard or Vineyard (Code: 18100)
- General Agriculture (Code: 18000)
- Urban/Developed (Code: 12000)

County Wetlands/Vegetation & Species Data Source: Pacific Southwest Biological Services, Inc.

Biological Resources Map - Offsite Deer Springs Road Impact Area

FIGURE 3A-2

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

0 150 300 600
Feet

N

Legend

- Offsite Deer Springs Road Impact Area
- Onsite Development Areas
- Project Boundary

County/CDFG Wetlands

- Coast Live Oak Woodland Associated with Stream Course (Code: 71160)

County Wetlands

- ACOE/CDFG/RWQCB Unvegetated Waters of the U.S.

Upland Vegetation Types/Landcovers:

- Coast Live Oak Woodland (Code: 71160)
- Non-Native Grassland (Code: 42200)
- Southern Mixed Chaparral (Granitic) (Code: 37121)
- Coastal Sage-Chaparral Scrub (Code: 37920)
- Coastal Sage-Chaparral Scrub (disturbed) (Code: 37920)

Vegetation Categories that are not Sensitive Habitat:

- Disturbed Habitat (Code: 11300)
- Eucalpytus Woodland (Code: 11100)
- Orchard or Vineyard (Code: 18100)
- General Agriculture (Code: 18000)
- Urban/Developed (Code: 12000)

County Wetlands/Vegetation & Species Data Source: Pacific Southwest Biological Services, Inc.

Biological Resources Map - Offsite Deer Springs Road Impact Area

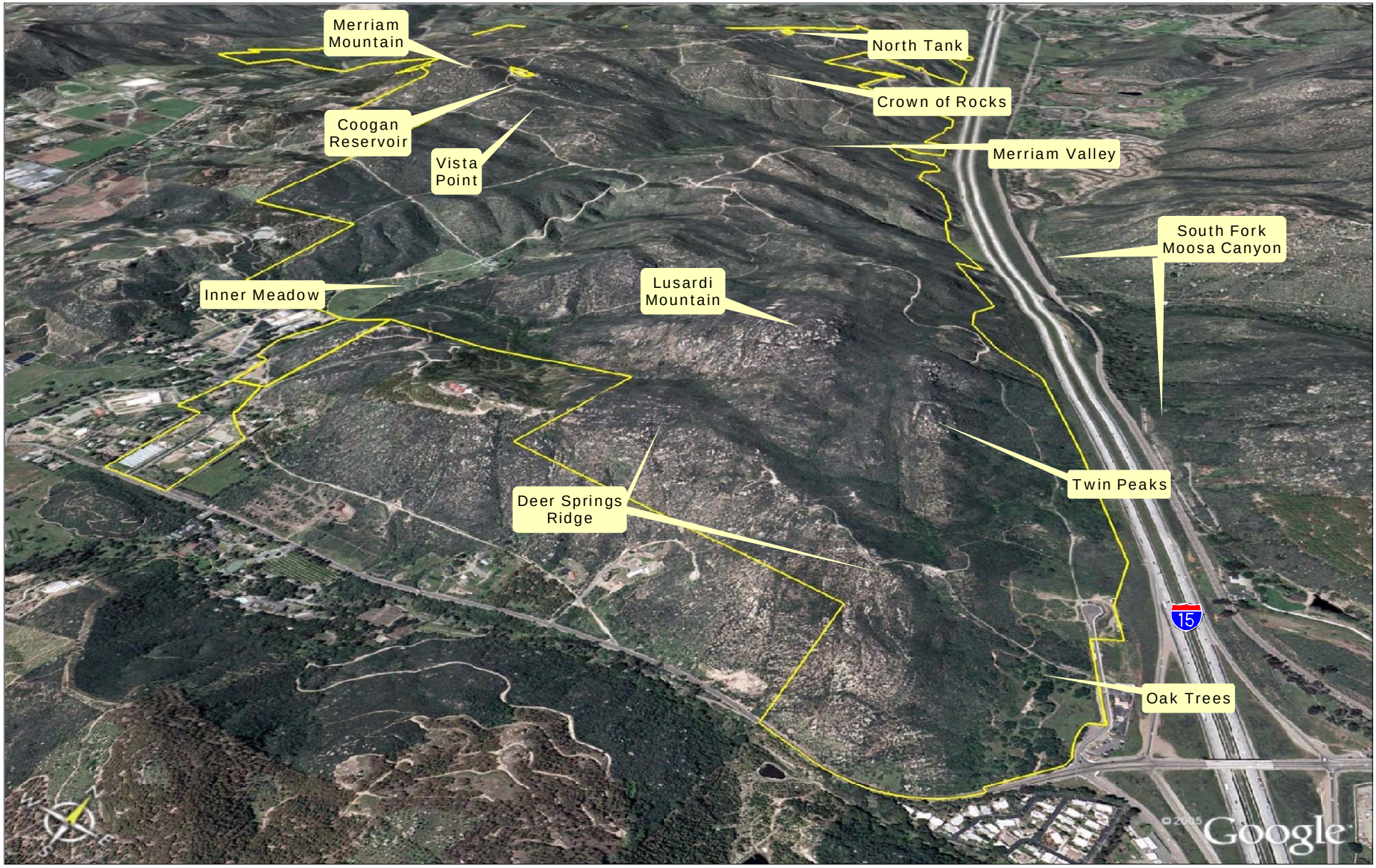
FIGURE 3A-3

MERRIAM MOUNTAINS SPECIFIC PLAN RESOURCE MANAGEMENT PLAN

0 150 300 600

Feet

N

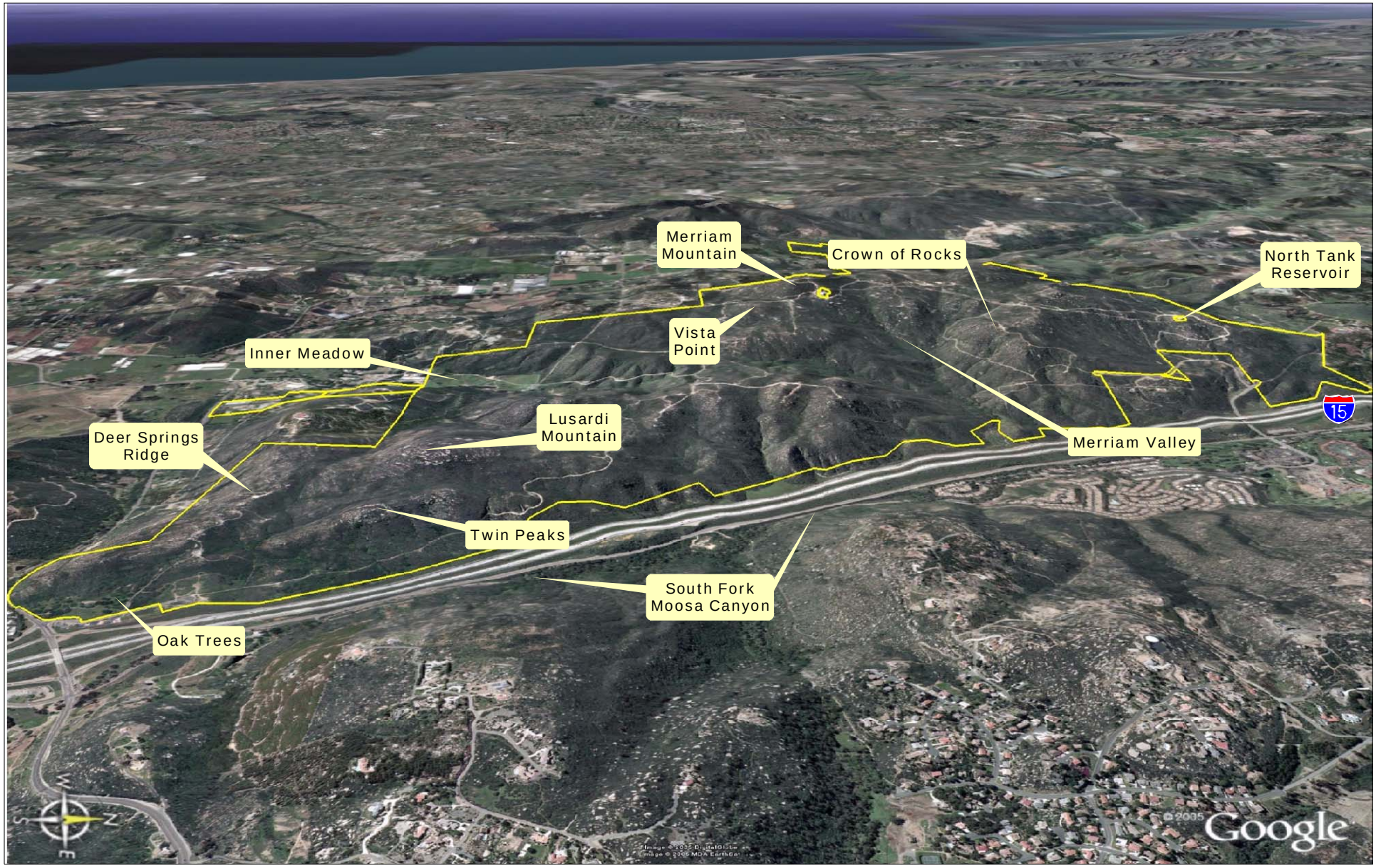


Visual Overview Looking North

FIGURE 4

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

N

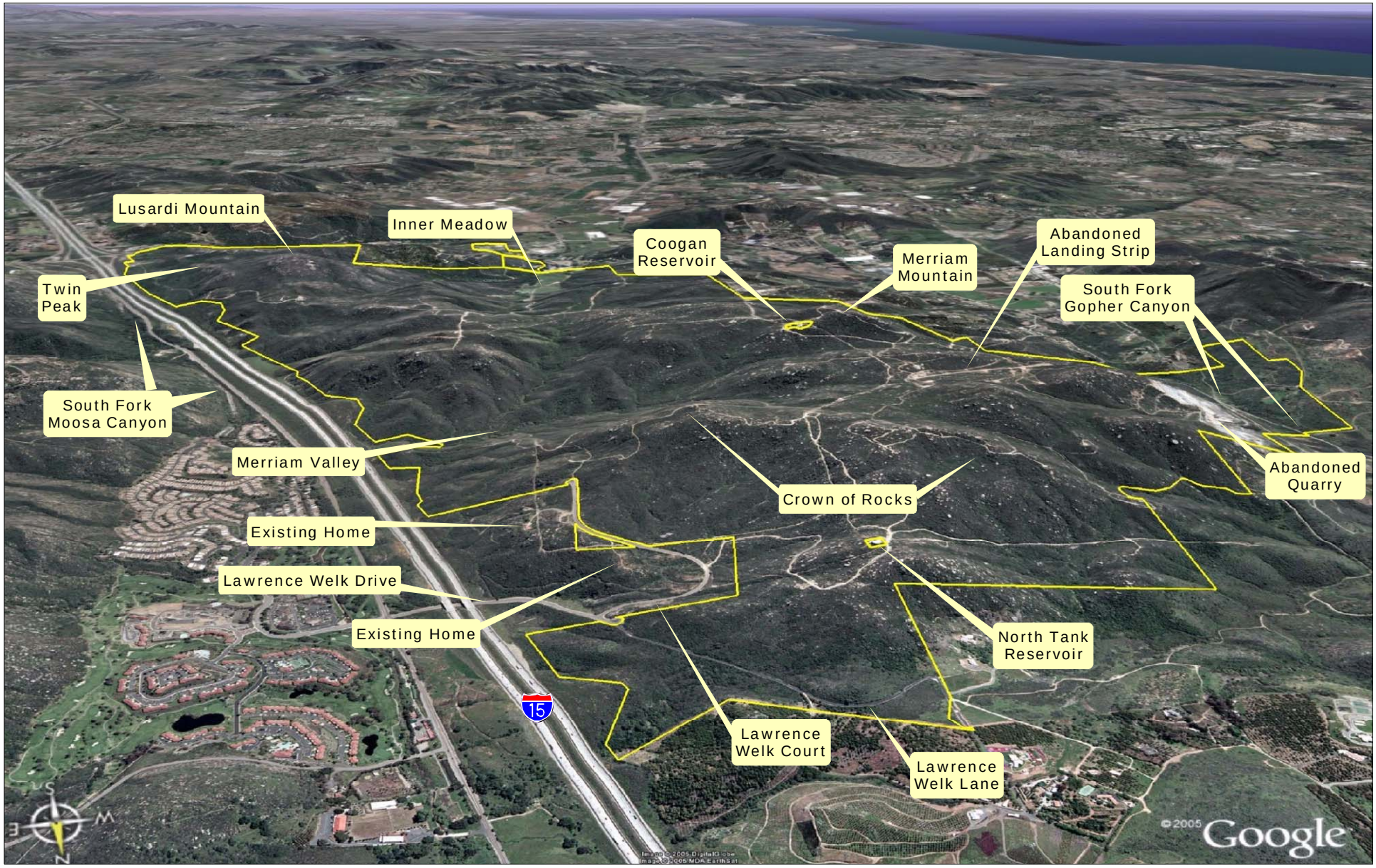


Visual Overview Looking West

FIGURE 5

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

N

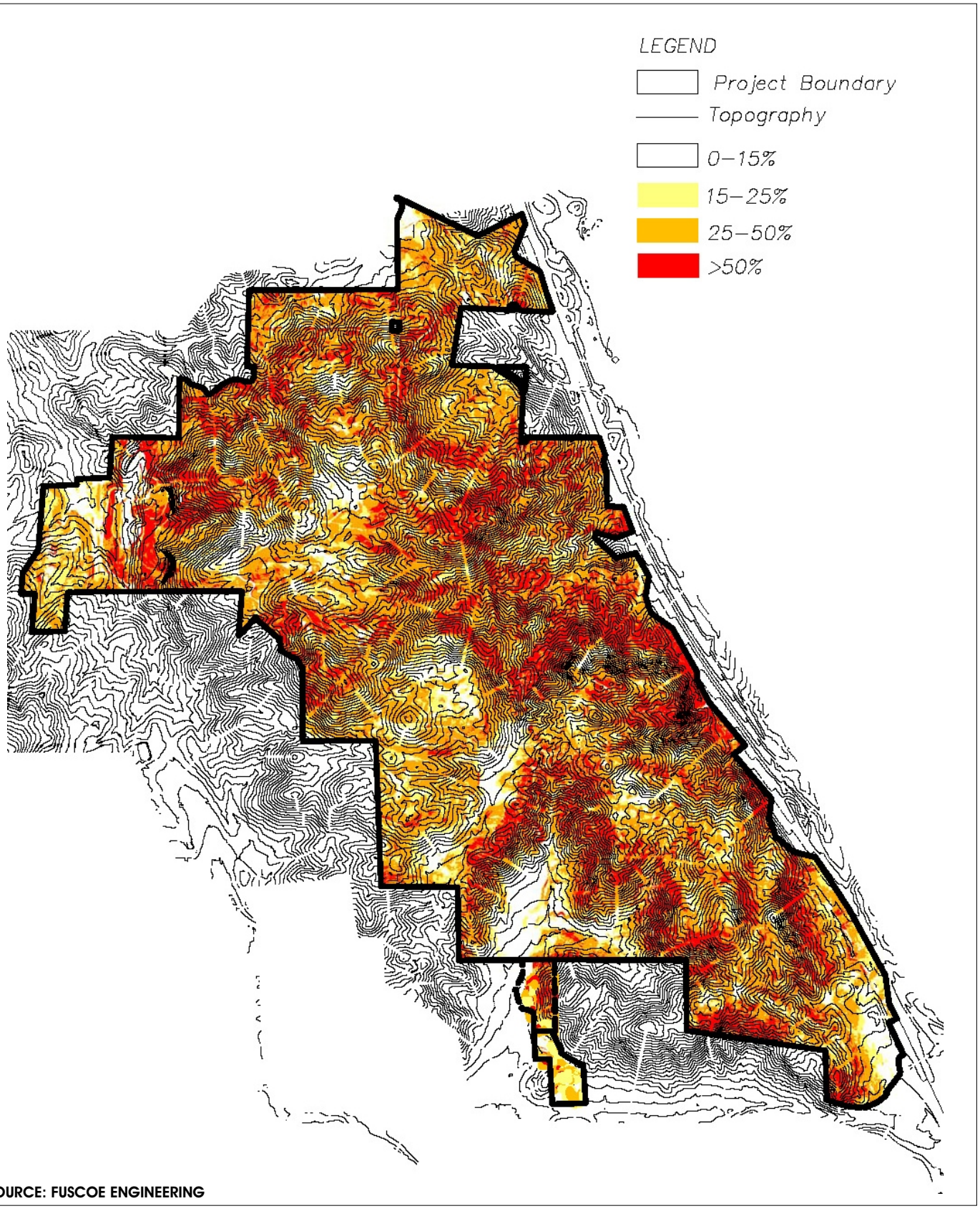


Visual Overview Looking South

FIGURE 6

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

N



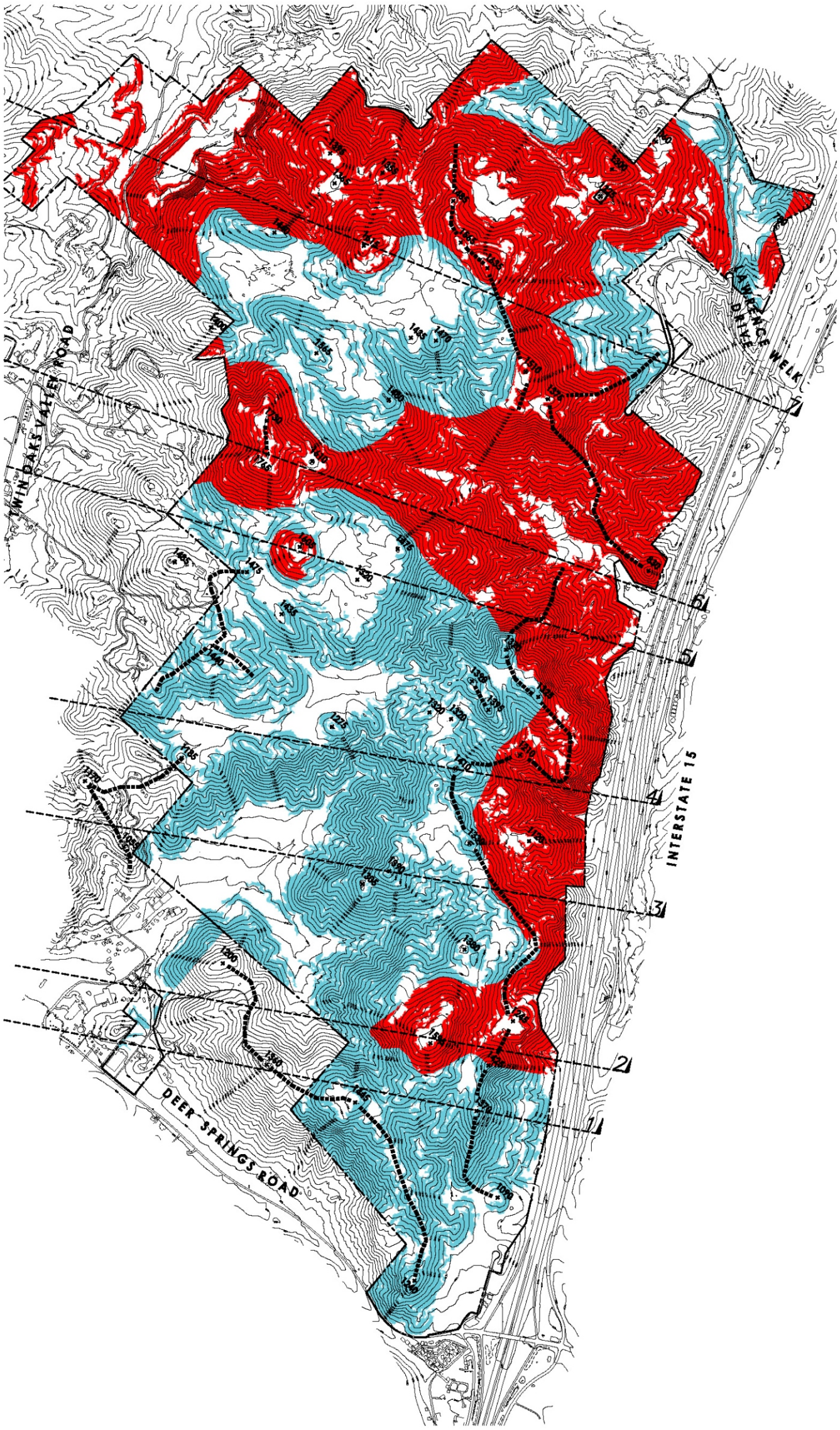
SOURCE: FUSCOE ENGINEERING

SLOPE CATEGORY

FIGURE 7

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

N



FUSCOE ENGINEERING
full circle thinking

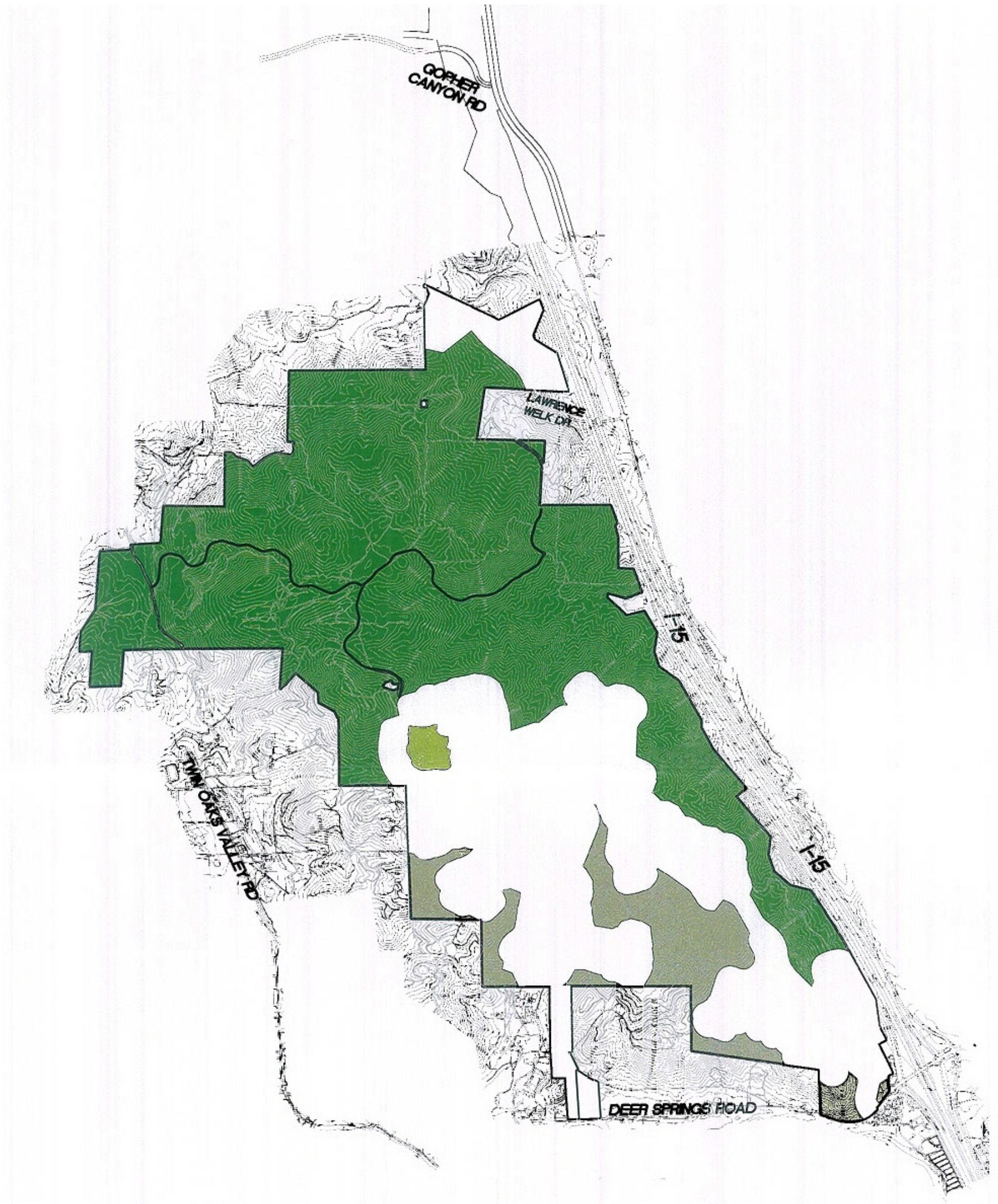
SOURCE: FUSCOE ENGINEERING

Significant & Insignificant Steep Slopes

FIGURE 8

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

N



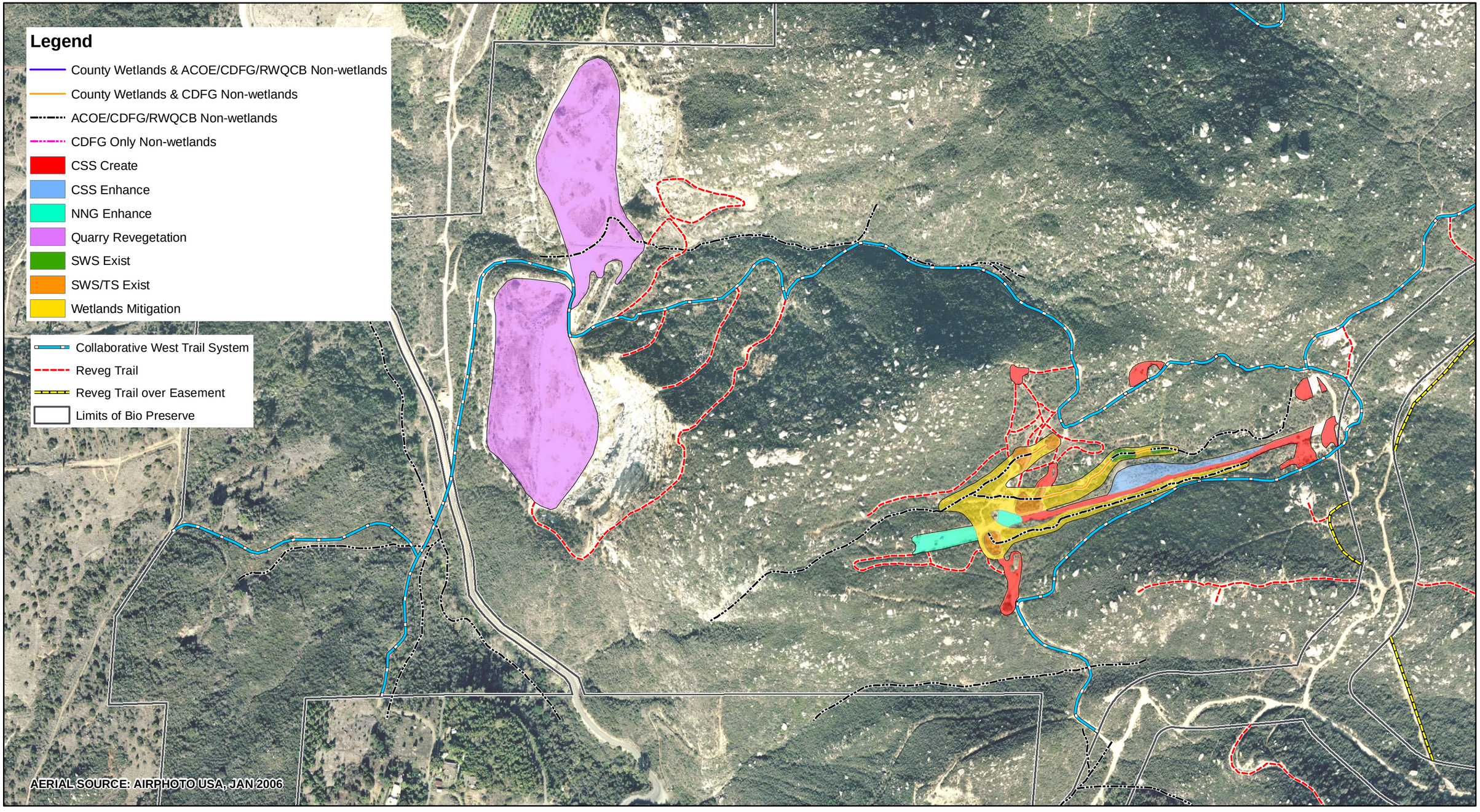
September 20, 2005 Wildlife Agencies Hardline Agreement

FIGURE 9

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

0 X X X
FEET

N



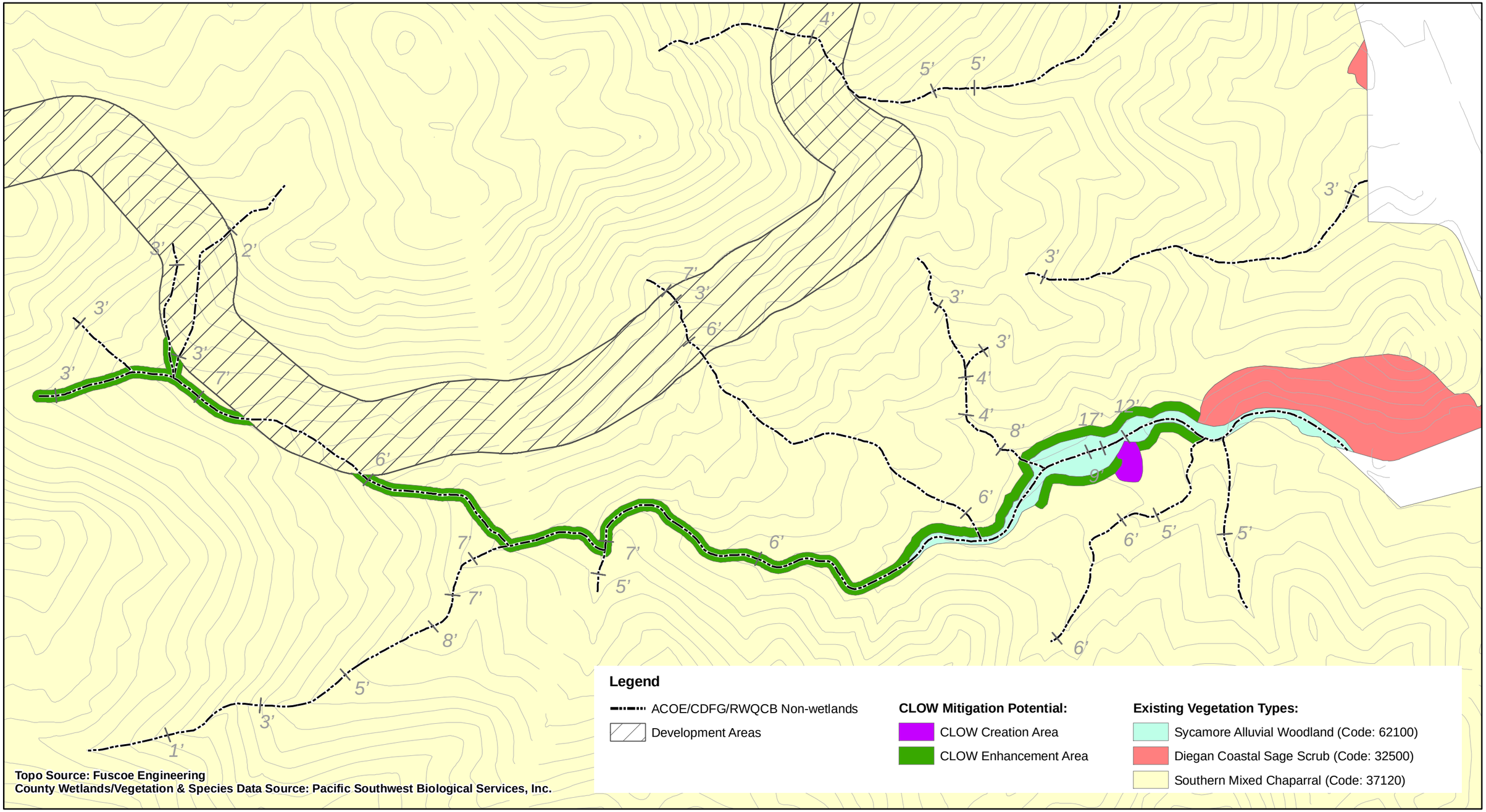
Willow Scrub Wetlands and Coastal Sage Scrub Uplands Revegetation at Abandoned Airstrip and Quarry

FIGURE
10A

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

0 200 400 800 Feet

N



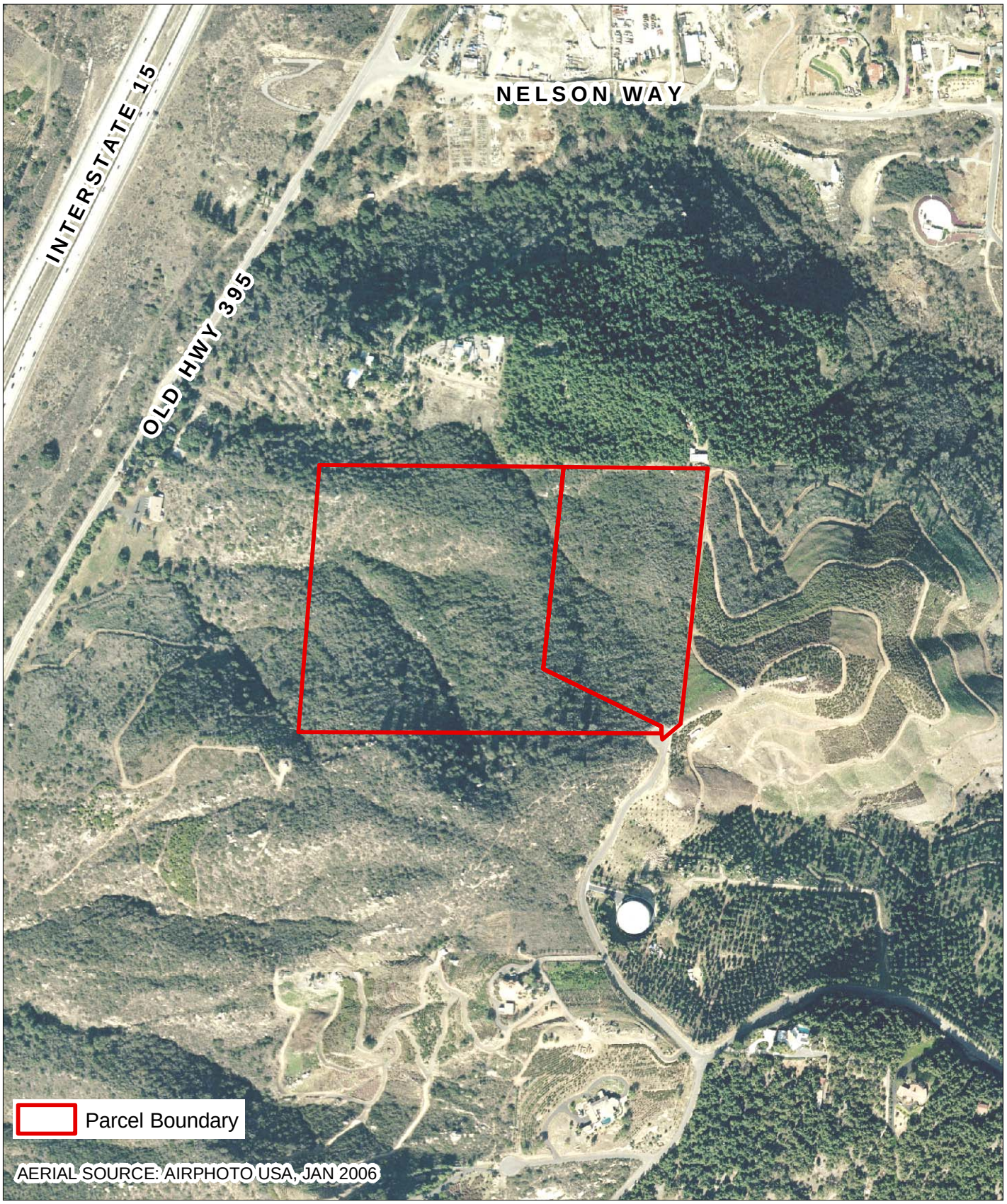
Coast Live Oak Woodland Mitigation Potentials at Main Onsite Open Space Drainage

FIGURE
10B

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

0 150 300 600 Feet

N



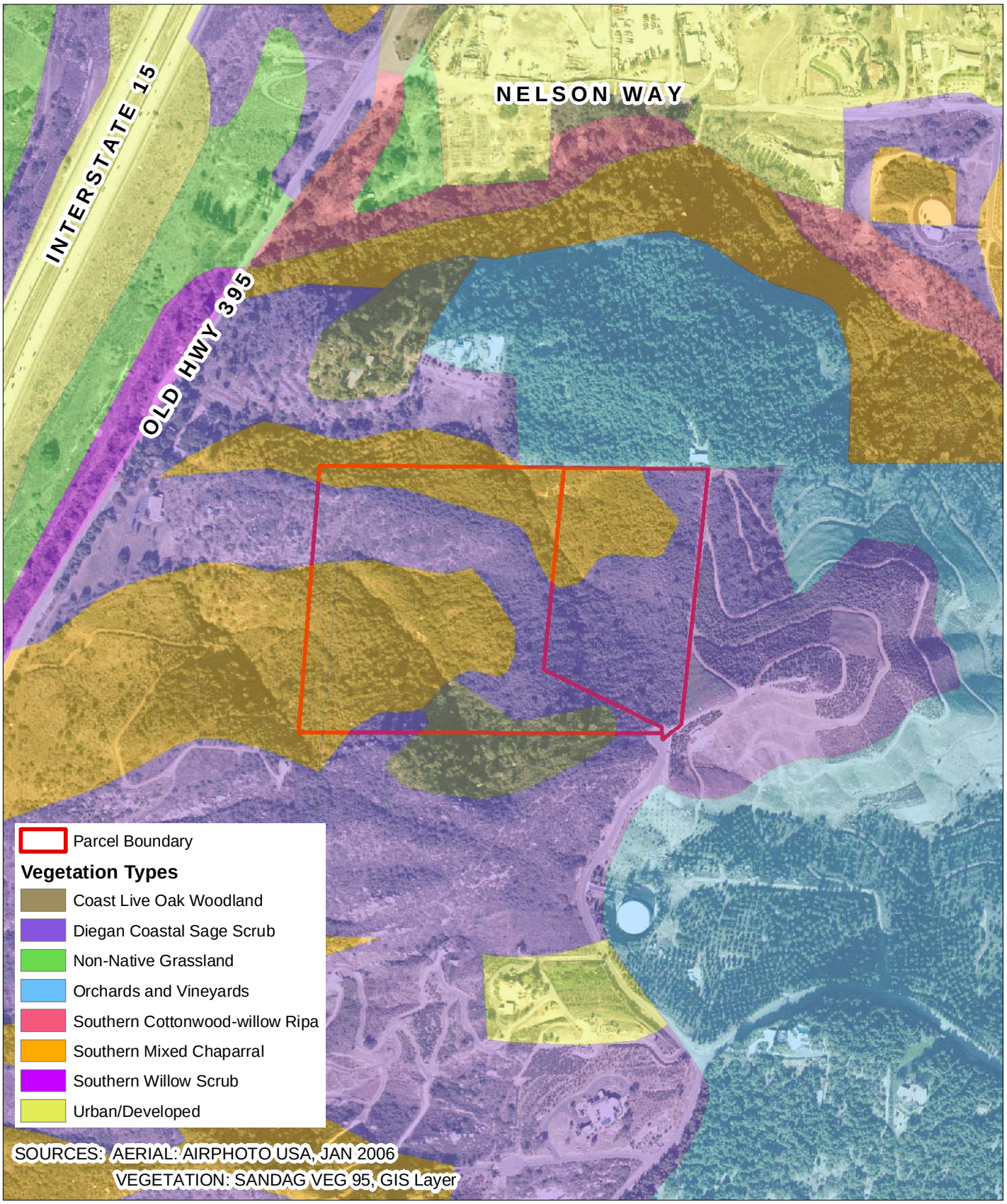
Captain's Associates Aerial

FIGURE 11

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

0 500 1,000
Feet

N



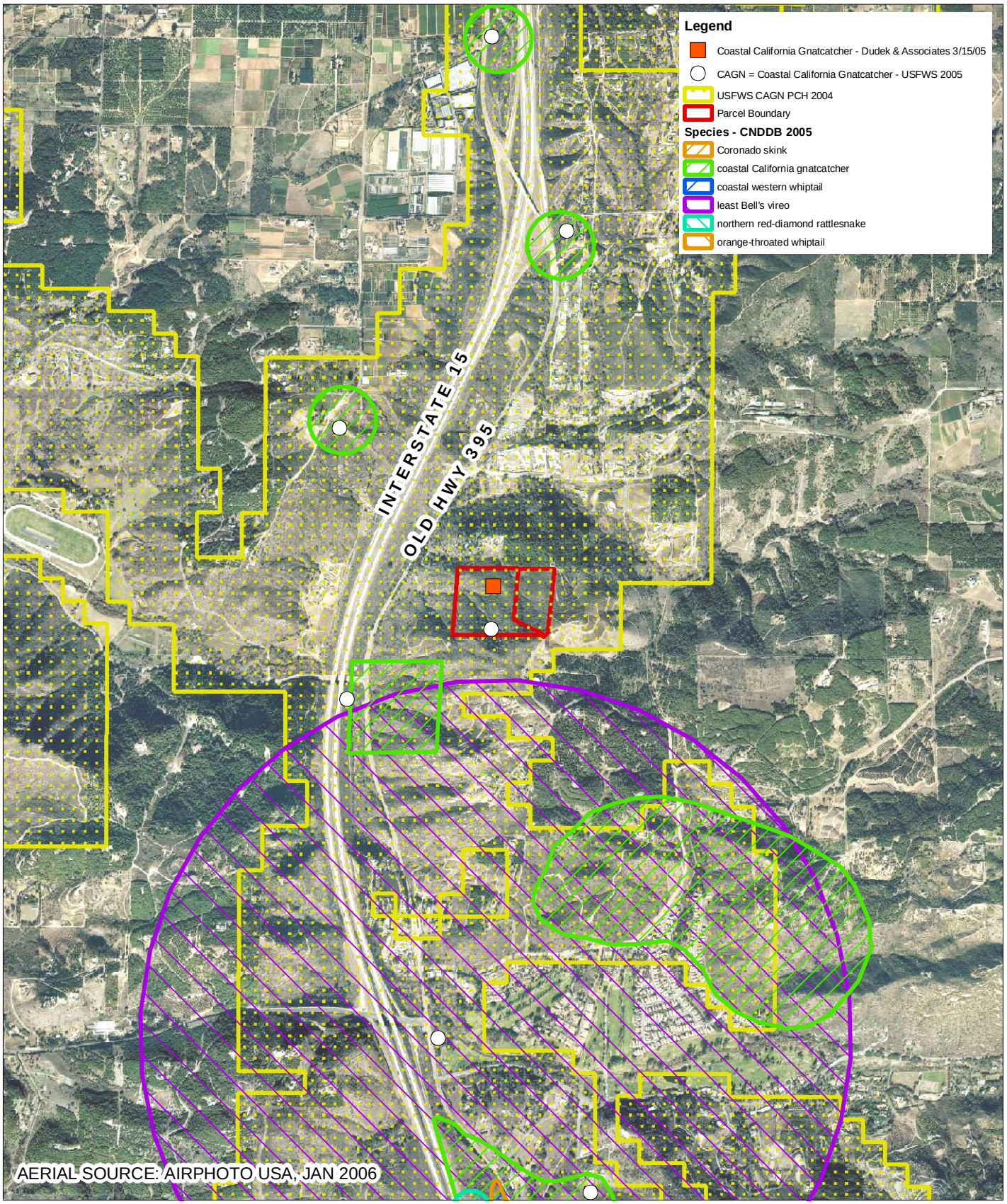
Captain's Associates: SANDAG Vegetation Types

FIGURE 12

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

0 500 1,000
Feet

N



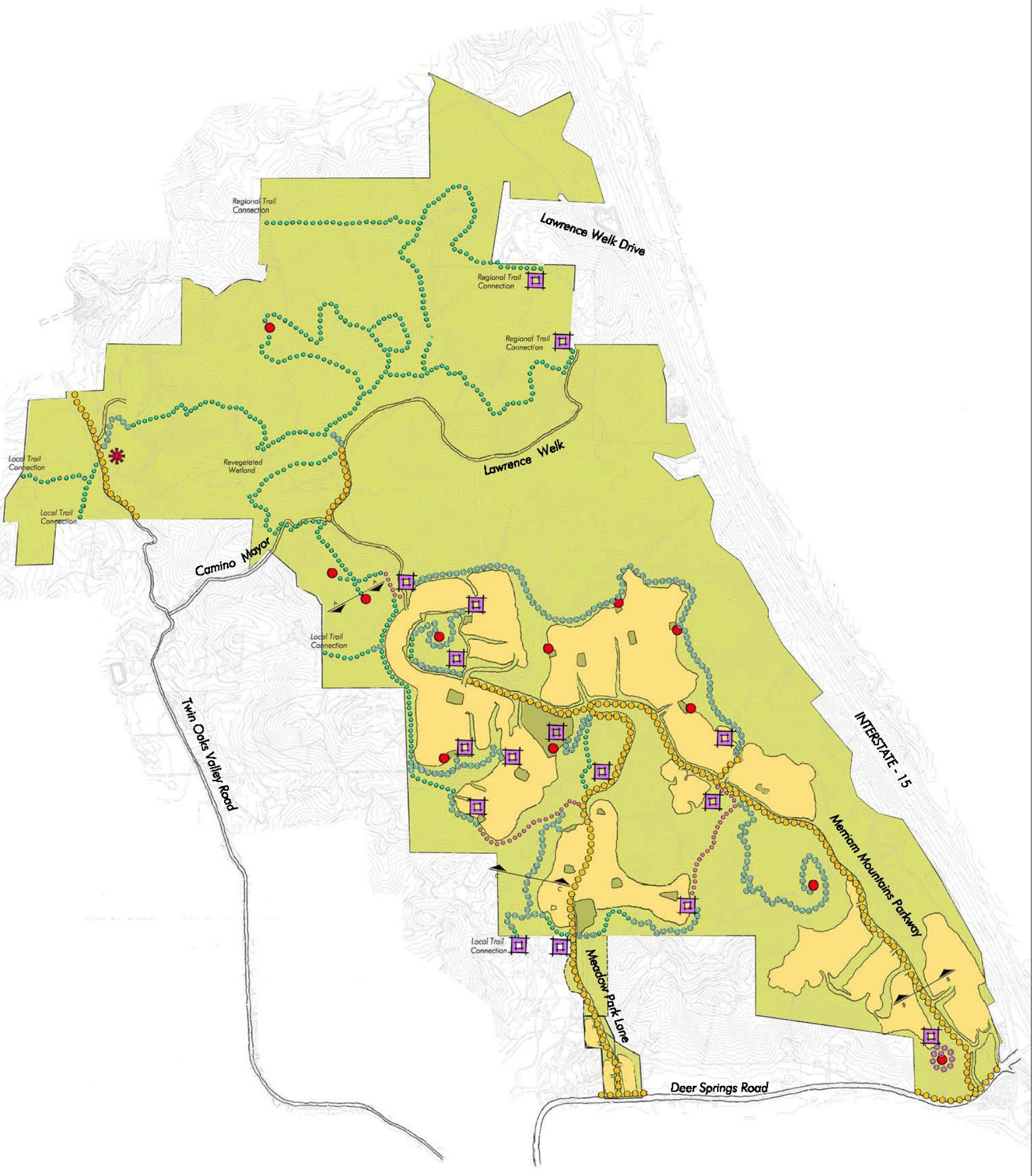
Captain's Associates: Sensitive Species

FIGURE 13

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

0 2,000 4,000
Feet

N



Conceptual Trail Plan

FIGURE
14

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

N

OS-4
OS-3
OS-7
OS-5
OS-8
OS-15
OS-6
OS-2
OS-16
OS-3
OS-15
OS-2
LAWRENCE WELK DR.
TWIN OAKS VALLEY RD
INTERSTATE 15
DEER SPRINGS ROAD

Legend

- Project Site
- Offsite Access Easement
- grading_apr07_mjrconts

Preserve Conveyance by Neighborhood

- N1: Portion of OS Lots 2 & 3
- N2: Portion of OS Lot 16
- N3: Portion of OS Lot 5
- N4: Portion of OS Lot 7
- N5: Portion of OS Lots 6, 8 & 15
- Est. Lots: Portion of OS Lot 4

Source: Fuscoe Engineering

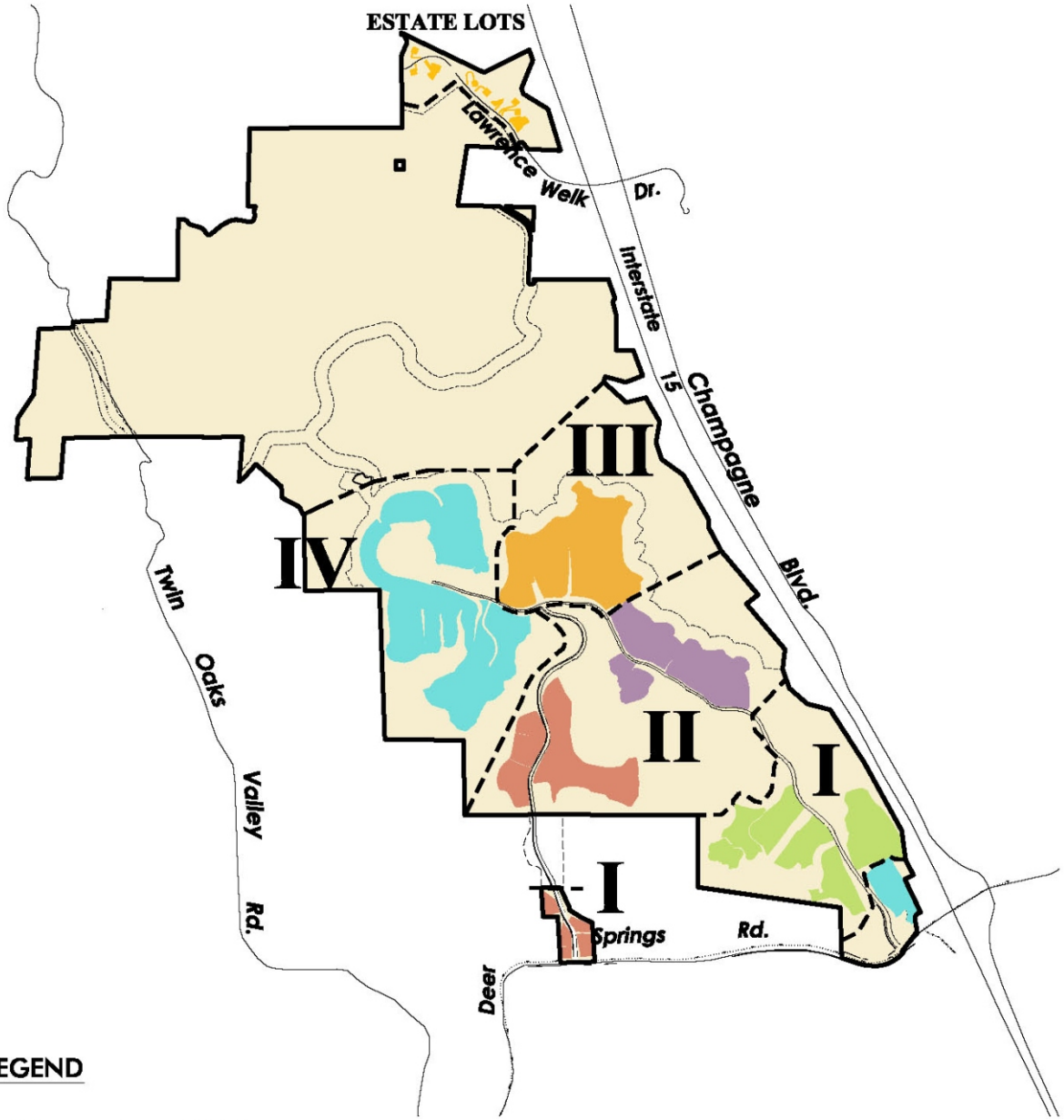
Biological Preserve Conveyance Plan

FIGURE 15

MERRIAM MOUNTAINS SPECIFIC PLAN
RESOURCE MANAGEMENT PLAN

0 0.125 0.25 0.5
Miles

N



LEGEND

PHASE I	Apartments (270 DU's), Variable Residential (820 DU's)
PHASE II	Single Family (248 DU's), Variable Residential (451 DU's)
PHASE III	Single Family (371 DU's)
PHASE IV	Single Family (530 DU's), Neighborhood Commercial
ESTATE LOTS	Estate Residential (10 DU's)

NTS

SOURCE: FUSCOE ENGINEERING

Project Development Phasing

FIGURE 16

N

APPENDIX A

Points of Agreement
for the
Merriam Mountains Project

Life | Land | Community

Points of Agreement of September 20, 2005
For the Merriam Mountains Project (SP04-006, FWS/CSFG-SDG-4514.1)

A meeting was held on September 20, 2005 to discuss and agree to basic project and preserve designs and MSCP hardlines for the Merriam Mountains project ("Merriam" or "Project"), includi the Specific Plan and any approvals required to implement the Specific Plan. The applicant, NNP-Stonegate Merriam, LLC ("Stonegate"), presented a draft alternative referred to as the September 2005 "All South" development plan ("All South Plan"), for review by the U.S. Fish and Wildlife Service, Department of Fish and Game (collectively "Wildlife Agencies"), and County of San Die staff ("County Staff") and to facilitate discussion and concurrence on the following Points of Agreement.

Summary of Fundamental Points of Agreement

A. County Staff and the Wildlife Agencies concur with the hardlines presented in the All South Plan, including location of a portion of the Merriam trail system in the preserve area to be described in the Merriam habitat management plan;

B. The Wildlife Agencies agree to consider the Captains' Associates parcel as adequate MSCP mitigation for CSS impacts resulting from the All South Plan;

C. County Staff and the Wildlife Agencies agree to cooperate in processing an HLP, if necessary, that will not require further avoidance of CSS habitat impacts currently shown on the All South Plan; and

D. County Staff agrees to address the County RPO in a way that allows the All South Plan to proceed as proposed in the interest of creating an ecologically superior plan.

Specifically, the Wildlife Agencies and County Staff agree to the following points:

MSCP/4(d) Compliance

1. County Staff and the Wildlife Agencies concur with the All South Plan as the agreed-upon hardline for Project and agree to proceed with the MSCP analysis using the hardline shown on the All South Plan;

2. County Staff and the Wildlife Agencies concur that a portion of the Merriam trail system may be located within designated biological open space (the MSCP preserve) and is a compatible use within the MSCP. The trail system will be designed to County joint use standards and will be presented to County Staff and the Wildlife Agencies for review;

3. Impacts to California gnatcatchers on the southeastern portion of the Project will be fully mitigated by purchase of the offsite Captains' Associates property as referenced in the Wildlife Agencies' July 13, 2005 letter; and

4. Should the Project be approved prior to issuance of MSCP permits, the County and the Wildlife Agencies will process an HLP to be included as a discretionary action in the Merriam EIR (with HLP findings included in the EIR). While it is understood that the Service cannot provide pre-decisional permit assurances as it pertains to 4(d) or Section 7 processes, the Wildlife Agencies will take into consideration that the Captains' Associates property satisfies mitigation requirements for impacts to CSS under the MSCP. The Wildlife Agencies further agree not to require further avoidance of CSS habitat other than that shown in the All South Plan.

Mitigation for Impacts to Biological Resources

1. MSCP/4(d) compliance will constitute full mitigation for direct, indirect and cumulative impacts with respect to sensitive habitats, sensitive species, and preserve design; and

2. The Wildlife Agencies will acknowledge in writing their acceptance of the All South Plan preserve design as full mitigation for all biological impacts and will not propose or recommend additional avoidance or minimization of impacts to wetland (jurisdictional) or other resources when future wetland permits (CDFG Streambed Alteration Agreement, ACOE 404, RWQCB 401) are submitted and processed for the Project. The Department of Fish and Game agrees specifically not to require further avoidance measures during processing of a1602 Streambed Alteration Agreement for the Project.

RPO Compliance

1. County Staff and the Wildlife Agencies agree that the All South Plan is not feasible to implement if the County RPO is strictly applied to areas outside of the designated biological open space (the MSCP preserve). Amendment of the RPO or allowance of an exemption for the Project is necessary to implement the All South Plan.

2. County Staff will support amendment of the RPO to allow impacts to RPO jurisdictional features (sensitive habitat, wetlands, slopes, cultural resources, floodplains) when such impacts allow a design that provides ecological benefits superior to a design that strictly complies with the RPO.

3. County Staff will support findings that impacts to RPO jurisdictional features resulting from the All South Plan are necessary to enhance the overall conservation values of the Project and to provide superior ecological benefits;

4. County Staff will submit the proposed amendment to the RPO for formal review and approval as soon as possible after execution of this Agreement.

GP 2020

1. County Staff concur that the All South Plan, including dwelling units, density, and proposed commercial uses, is consistent with GP 2020 and will be incorporated into the Staff Alternative of the GP 2020 Working Copy;

2. Project processing will not be delayed during preparation of GP 2020; and

2. Project processing will not be delayed during preparation of GP 2020; and

3. County Staff and the Wildlife Agencies will not support any reduction in density or intensity in the All South Plan without a corresponding reduction in the size of the biological open space.

Wildlife Agencies' Requests

1. All fire management buffers for the Project will be located outside the biological open space. The fire management plan, including amount and location of fire management buffers within the development area, will be presented to County Staff and the Wildlife Agencies once the plan is approved by the Fire Marshall; and

2. The Wildlife Agencies recognize and accept the fire roads through the biological preserve as proposed, but strongly encourage the County to develop a biologically superior access plan utilizing existing private roads through the private property to the west of the All South Development Area and to also eliminate the access to Lawrence Welk Drive.

   If, by November 15, 2005, the County is successful in obtaining the necessary access rights, the alternative plan is acceptable to the Deer Springs Fire District Fire Marshall and the San Diego County Fire Marshall, and the costs to permit and construct the alternative road are not increased from the currently proposed road, the applicant agrees to amend its plan and construct the access along this alternative route.

Meeting Participants

Therese O'Rourke, Susan Wynn, U.S. Fish and Wildlife Service; Larry Eng, David Mayer, Department of Fish and Game; Tom Oberbauer, County of San Diego; Joe Perring, Stonegate Development; June Collins, Elizabeth Candelo, Dudek; Eric Armstrong, Bob Chase, Fuscoe Engineering; Brice Bossler, The Bossler Group; Michael McCollum, McCollum Associates.

Concurrence Initials

COUNTY OF SAN DIEGO

By: _____

Date: _____

NNP-STONEGATE MERRIAM, LLC
By: Stonegate Merriam Mountains, LLC

By: _____
Joe Perring, Vice President
Project Manager

Date: October 10, 2005

U. S. FISH & WILDLIFE SERVICE

By: _____

Date: _____

DEPARTMENT OF FISH & GAME

By: _____

Date: _____

Points of Agreement
Merriam Specific Plan
September 27, 2005
Page 3

2. Project processing will not be delayed during preparation of GP 2020; and

3. County Staff and the Wildlife Agencies will not support any reduction in density or intensity in the All South Plan without a corresponding reduction in the size of the biological open space.

Wildlife Agencies' Requests

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Therese O'Rourke, Susan Wynn, U.S. Fish and Wildlife Service; Larry Eng, David Mayer, Department of Fish and Game; Tom Oberbauer, County of San Diego; Joe Perring, Stonegate Development; June Collins, Elizabeth Candela, Dudek; Eric Armstrong, Bob Chase, Fuscoe Engineering; Brice Bossler, The Bossler Group; Michael McCollum, McCollum Associates.

Concurrence Initials

COUNTY OF SAN DIEGO

By: _____

Date: _____

NNP-STONEGATE MERRIAM, LLC
By: Stonegate Merriam Mountains, LLC

By: _____
Joe Perring, Vice President
Project Manager

Date: October 12, 2005

U. S. FISH & WILDLIFE SERVICE

By: _____

Date: October 12, 2005

DEPARTMENT OF FISH & GAME

By: _____

Date: _____

GARY L. PRYOR
DIRECTOR

County of San Diego

DEPARTMENT OF PLANNING AND LAND USE

5201 RUFFIN ROAD, SUITE B, SAN DIEGO, CALIFORNIA 92123-1666
INFORMATION (858) 694-2960
TOLL FREE (800) 411-0017

SAN MARCOS OFFICE
338 VIA VERA CRUZ - SUITE 201
SAN MARCOS, CA 92058-2620
(760) 471-0730

EL CAJON OFFICE
200 EAST MAIN ST. - SIXTH FLOOR
EL CAJON, CA 92020-3912
(619) 441-4030

November 1, 2005

Mr. Joseph Perring
27071 Cabot Road, Suite 106
Laguna Hills, California 92653

Dear Mr. Perring:

This letter is in regards to your request to establish a "hard-line" area within the North County Multiple Species Conservation Plan (MSCP) for the Merriam Project.

For MSCP purposes, the Department of Planning and Land Use supports your current proposal to eliminate the northern development node. This represents a significant step forward in implementing the North County Plan. Furthermore, DPLU will continue to work cooperatively and aggressively with the wildlife agencies to address any remaining issues in the southern portions of the site and complete the "hard-line" approval.

We look forward to continuing to work with you and your team on this project.

Sincerely,

IVAN HOLLER, Deputy Director
Department of Planning and Land Use

IH:clc

cc: File

p.1

NOV 01 05 09:48a

APPENDIX B

Merriam Mountains Project Wetland Mitigation Requirements

WETLANDS AND UPLANDS CONCEPTUAL REVEGETATION PLANS
MERRIAM MOUNTAINS SPECIFIC PLAN

Prepared for:

NNP-STONEGATE MERRIAM, LLC

10815 Bernardo Road, Suite 310
San Diego, California 92127

Prepared by:

DUDEK

605 Third Street
Encinitas, California 92024

MAY 2007

TABLE OF CONTENTS

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LIST OF FIGURES

LIST OF TABLES

1.0 INTRODUCTION

This conceptual mitigation and revegetation plan provides conceptual guidelines for the mitigation and revegetation of various upland and wetland habitats associated with the Merriam Mountains project. This is intended as a guide to the proposed acreages and locations for various mitigation needs for the project, which would occur both on site as well as off site at yet to be determined locations. This plan would be further refined at a later date, once detailed locations have been worked out. The conceptual guidelines presented herein would be used as the basis of design for the final plan.

1.1 Project Setting

The Merriam Mountains project (Merriam) consists of approximately 2,327 acres located with the Merriam Mountains of northern San Diego County. The site is bordered by I-15 to the east, Deer Springs Road (S12) to the south, and Twin Oaks Valley Road to the west with a small portion of the western edge of the site traversed by Twin Oaks Valley Road, and the northeast corner of the site traversed by Lawrence Welk Drive. Gopher Canyon Road is located approximately 1 mile north of the site (see *Figures 1* and *2*).

The site lies within the central portion of the Merriam Mountains, a narrow chain of low mountains generally running north to south with a variety of east-west trending ridgelines and scattered peaks. These mountains originate near the northern end of the urban portions of the cities of Escondido and San Marcos. Large granodiorite outcroppings and pinnacles commonly occur throughout the Merriam Mountains range on the property.

Natural topography on the sites is comprised of hills and valleys dominated by significant rock outcroppings with moderate to steeply sloping terrain. On-site elevation ranges from approximately 850 feet above mean sea level (AMSL) near the intersection of Deer Springs Road and I-15 to about 1,650 feet AMSL in the north central portion of the property. Prominent, generally east-west trending ridgelines divide the site into five separate drainage basins tributary to Moosa Canyon, Gopher Canyon, and San Marcos Creek.

Vegetation on the Merriam site consists of large blocks of southern mixed chaparral with scattered patches of other upland and wetland vegetation, such as Diegan coastal sage scrub, coast live oak woodlands, and southern willow scrub. Due to the extensive nature of the chaparral covering most of the site, wildlife movement is generally confined to existing dirt roads and the main drainages running through the project. Two well-developed riparian areas

exist on site, one west of I-15 draining into the South Fork of Moosa Canyon and one in the south fork of Gopher Canyon, between the Merriam Mountains and the San Marcos Mountains.

1.2 Uplands and Wetlands Mitigation Requirements Purpose and Function

The Merriam Mountains project would result in impacts to both wetland and upland habitats. Impacts to wetlands would occur through both on-site development and off-site roadway improvements along Deer Springs Road and would be mitigated at a 3:1 ratio. The anticipated locations of both upland and wetland habitat mitigation sites on site are identified on *Figures 1* and *2*. The proposed grading and planting requirements for the mitigation/revegetation areas, guidelines for preparation of a Final Mitigation and Monitoring Plan, guidelines for preparation of Final Revegetation Construction Documents, Implementation Requirements, Maintenance Requirements, Monitoring Requirements, Long-Term Management, and Success Standards Criteria have been provided herein to address the mitigation requirements for both wetlands and uplands habitats.

2.0 CONCEPTUAL WETLAND MITIGATION AND REVEGETATION PLAN

The following section addresses the conceptual guidelines for mitigation and revegetation for wetland impacts from the project.

2.1 Wetland Mitigation Requirement Summary

The proposed Merriam Mountains project will impact wetlands both inside the project boundaries as well as off site. Wetland resources within the study area have been categorized as either County of San Diego, Resource Protection Ordinance (RPO) wetlands, or as other jurisdictional waters outside of County jurisdiction. A detailed analysis of wetland resources and impacts incurred by the proposed project are provided in Section 3.3 (Wetlands) of the *Merriam Mountains Specific Plan, Appendix F, Resource Protection Study* (Dudek, December 2006). On-site impacts will result from the proposed development and infrastructure improvements. In addition, impacts would occur due to the road widening improvements along Deer Springs Road. Impacts to wetlands will require compensatory mitigation and will be provided at a 3:1 mitigation ratio. Mitigation for wetland impacts to southern willow scrub/mulefat scrub, mulefat scrub, southern willow scrub, and non-vegetated channel from the development will occur on site within the preserved biological open space. The remainder of the mitigation acreage for impacts to coast live oak woodland (associated with streamcourse) and southern coast live oak

riparian forest will be provided both on site within biological open space, as well as off site at yet to be determined locations adjacent to the project. The off-site goal would be to find locations within the same watershed areas to the degree possible and where reasonable opportunities exist for wetlands creation and riparian habitat expansion.

The required wetland mitigation acreages required by the project are shown in *Table 1*.

TABLE 1
Wetlands Mitigation Requirement for Development Impacts

Habitat Category	Total Impact*	Mitigation Ratio	Mitigation Acre
Southern coast live oak riparian forest	1.3	3:1	3.9**
Coast live oak woodland (CLOW) associated with streamcourse	0.1	3:1	0.3***
Southern willow scrub/mulefat scrub	0.3	3:1	0.9***
Mulefat scrub (MFS)	0.2	3:1	0.6***
Southern willow scrub (SWS)	0.3	3:1	0.9***
Non-vegetated channel (subject to ACOE permit)	0.8	1:1	0.8***
Total	**3.0**		**7.4**

* Impacts include both on site as well as off site.
** Mitigation to be provided at an off-site location to be identified.
*** Mitigation to be provided on site through creation/enhancement.

2.2 Wetland Mitigation On Site

The potential for wetland mitigation creation and enhancement on site was evaluated by Dudek within the project boundaries and only two suitable locations were identified. Several other small wetland patches within the project boundaries were evaluated, but were either determined to be too constrained from existing utilities locations (e.g., the San Diego County Water Authority pipeline along Twin Oaks Valley Road), were too small in size, or were in terrain too steep to allow for any reasonable wetland mitigation/revegetation effort (e.g., the two isolated wetland southern willow scrub patches in the north central portion of the site), or were already surrounded by existing native habitat and did not allow for wetlands expansion without impacting other adjacent native habitat. The chosen locations offer the best opportunities to achieve reasonably-sized wetland mitigation creation and enhancement areas that could ultimately become self sustaining over time.

2.2.1 Southern Willow Scrub and Mulefat Scrub Mitigation On Site

The chosen locations for southern willow scrub and mulefat scrub mitigation on site are in proximity to the old airstrip area, in the north central portion of the site, in a location which will be preserved as part of the project's permanent biological open space. In this location, several (i.e., six) remnant patches of southern willow scrub (SWS) and southern willow scrub/tamarisk scrub (SWS/TS) vegetation exist along several intermittent drainages that run through the area. This location lies in a broad valley with a primary drainage running through it, predominantly from east to west. Secondary drainages enter from both the south and north sides of the valley and join the main drainage before it drops down the canyon to the west through existing southern mixed chaparral habitat.

This area was previously disturbed by the grading of an old historic airstrip, from the grading of access roads, as well as from disturbances from previous off-road vehicle use and trash/debris dumping. The area has subsequently been invaded by several exotic/invasive species, including salt cedar (*Tamarix* sp.), pampas grass (*Cortaderia selloana*), and fennel (*Foeniculum vulgare*). From the evidence of the existing remnant wetland vegetation present, including willow scrub species (i.e., primarily arroyo willow [*Salix lasiolepis*] and mulefat [*Baccharis salicifolia*]), it appears as though there is sufficient intermittent drainage and groundwater resources present at this location to support the survival of wetland SWS and MFS species. From the distribution of the remnant patches of SWS and MFS vegetation scattered throughout the site, it appears that there may have been a larger stand of southern willow scrub habitat present in this location at some previous point in time, prior to the site disturbances. As a result, it appears that the current wetland resources in this location could be expanded upon and enhanced to provide a larger contiguous area of wetland habitat. Preliminary estimates indicate that approximately 4.2 acres of wetland creation and 0.7 acre of wetland enhancement could be achieved within this location, for a total of approximately 4.9 acres of wetland mitigation credit (see *Figure 1*). Impacts to willow scrub wetlands (i.e., southern willow scrub/mulefat scrub, mulefat scrub, southern willow scrub, and non-vegetated channel) only require 3.6 acres to be mitigated on site through creation/ enhancement at the abandoned airstrip (see *Figure 2*). The final configuration of these mitigation areas will be determined during preparation of the final mitigation plan and revegetation construction documents.

The mitigation/revegetation goal in this old airstrip location would be to remove the exotic/ invasive species (i.e., tamarisk, pampas grass, and fennel), remove all trash and debris, restore drainage connections through grading to eliminate the off-road vehicle trails and roads through the area, and to plant appropriate wetland plant species to support the habitat expansion and enhancement. Grading would be conducted to re-create the main drainage, as well as to establish

some new drainage connections to the secondary drainages. Grades would be established to place the proposed wetland revegetation areas in better proximity to the intermittent drainage flow, as well as to take advantage of subsurface groundwater conditions. This will allow for the connection of the remnant patches of SWS and MFS vegetation, and would help provide larger contiguous SWS and MFS habitat areas. This will also help provide improved functions and values for the remnant SWS and MFS patches and will help expand upon wetland resources in this location. This will also provide additional water quality improvements by helping to treat on-site drainage run-off through the filtering effect of wetland vegetation. This will also help provide important wildlife resources and habitat expansion in this location.

2.2.2 Coast Live Oak Woodland (associated with stream) Mitigation On Site

The chosen location for the coast live oak woodland (associated with stream course) mitigation acreage was selected within the main drainage of the biological open space that runs from west to east towards I-15. This location currently supports willow/oak/sycamore woodland in the lower easterly end of the drainage, near I-15, and includes numerous scattered coast live oaks interspersed along the drainage as it runs through southern mixed chaparral to the east (*see Figure 3*). It is felt that these areas could support some limited creation acreage, as well as more extensive enhancement acreage to add additional coast live oaks along the margins of the drainage, in order to help enhance and expand upon habitat diversity.

2.3 Wetland Mitigation Off Site

Impacts to oak riparian wetlands (southern coast live oak riparian forest and coast live oak woodland (associated with stream course) will require a total of 4.2 acres of mitigation acreage. This will be accommodated both on site (i.e., within biological open space) as well as off site at yet to be determined locations. These sites will be determined as part of the final design and preparation of a Final Revegetation Plan that will be prepared at a later date, prior to issuance of grading permits. Off-site wetland mitigation potential was evaluated by Dudek and several prospective off-site locations/parcels have been identified. Several of these areas present opportunities for both oak woodland and oak riparian forest mitigation, as needed by the mitigation program to provide the needed mitigation acreage. The final selection of the off-site mitigation parcel/s has not been completed at this time due to the difficulty in identifying suitable acquisition parcels and available land. The final selection of the site/s and the detailed final revegetation plans (i.e., construction documents/plans and specifications) for the various wetland mitigation areas will be required as a condition of approval and will need to be approved prior to initiation of rough grading of the first phase of the development.

2.4 Grading and Planting Requirements for the Wetland Mitigation Areas

The areas proposed for wetland mitigation/revegetation shall be adequately excavated/graded to provide appropriate planting elevations relative to the intermittent drainage flow through the areas, as well as to subsurface groundwater resources and based upon the desired habitat to be developed in each location. Designated areas of disturbance, and/or areas to receive grade modifications within the wetland mitigation/revegetation areas, will be revegetated with appropriate native wetland species. Adequate stability of graded areas and planting locations will be achieved through the use of erosion control measures and/or through appropriate planting in order to provide adequate soil stability to resist erosion. Down-grading (i.e., excavation) of soils in the disturbed upland areas adjacent to the wetlands will take place in order to convert disturbed upland vegetation to wetlands. This will occur in order to provide the appropriate elevations relative to ground water resources, and/or secondary drainage flow hydrology, in order to provide the appropriate wetland conditions to support the intended native wetland species over the long-term. Fine grading will be achieved within the intended wetland creation areas to establish final planting elevations and to help create micro-topography to help reduce creek flow velocities, spread out the water flow, and maximize retention and deposition of sediment and pollutants**.** Wetland vegetation in the creation and enhancement areas will be selected to expand upon the existing wetland resources, optimize uptake of pollutants, and help provide water quality improvements where feasible.

All plant materials specified for the wetland revegetation areas will be native species appropriate to the area and will be compatible with the existing adjacent native habitat areas. Plant material selections, sizes, and quantities will be appropriate to help assure adequate plant establishment and to help achieve the goal of self sustainability of the revegetated habitats by the end of an initial 5-year time frame. A mixture of container plantings, cuttings, and seeding will be utilized as appropriate to the areas being planted and as specified on the final conceptual mitigation plan and the final revegetation construction documents (i.e., plans, details, and specifications).

Soil conditions in the areas to be revegetated will be tested and evaluated by a soil and plant laboratory in order to determine soil fertility and agricultural suitability for the intended vegetation and habitat types. Amending of infertile soils may be necessary if soils analysis results indicate that deficiencies exist within the site soils that could affect the growth of the intended native species. All amending requirements will be specified on the final revegetation construction documents.

2.5 On-Site and Off-Site Wetlands Revegetation Mitigation and Monitoring Plan

A final wetlands mitigation and monitoring plan (i.e., written report, Mitigation Plan) will be prepared to provide installation, maintenance, and monitoring guidelines for the intended wetland mitigation/revegetation program for both the on-site as well as off-site locations. The report will provide conceptual guidelines addressing the required mitigation program, the implementation guidelines, maintenance strategies, monitoring and reporting requirements, and ultimate success standards by which the program will be evaluated. The Mitigation Plan will include the goals of the program and the implementation guidelines and will include preliminary plan view layouts showing the various intended on-site and off-site revegetation areas. The report will also include plant palette tables indicating the intended revegetation plant materials, their intended size, spacing on center, and densities and compositions for the various intended wetland creation and enhancement areas.

2.6 Final Revegetation Construction Documents

A set of final revegetation construction documents (i.e., plans, details and specifications) will be prepared by a State of California registered landscape architect/habitat restoration designer in order to implement the biological intent for the various mitigation/revegetation areas, as outlined in the final mitigation plan. The construction documents shall be prepared for all on-site and off-site mitigation areas. The plans may be a comprehensive set showing all sites, or separate sets of plans, depending upon the intended revegetation/mitigation implementation phasing strategy. The construction documents shall detail all site preparation and demolition, grading, irrigation, planting, seeding, and maintenance requirements for the wetland mitigation/revegetation areas. The construction documents shall be of sufficient detail for bidding and construction of the mitigation/revegetation areas.

The construction documents shall be reviewed and approved by the County and the appropriate resource agencies, based upon permitting requirements, prior to actual implementation.

2.7 Implementation Requirements

All wetland mitigation/revegetation areas will be installed per the requirements outlined in the final revegetation construction documents (i.e., plans, details and specifications) and shall be maintained for an initial 120-day plant establishment maintenance period. The implementation and maintenance shall be conducted by a licensed Landscape Contractor (State of California C-27) familiar with native wetland and upland revegetation projects. The contractor shall have a

minimum of 3 years of experience in native habitat mitigation installation and maintenance, and shall be able to demonstrate the successful completion of a minimum of three wetland mitigation projects in Southern California.

The implementation of the wetland mitigation program shall be monitored by a habitat restoration specialist/biologist familiar with the implementation of wetland mitigation programs. The monitor shall verify and document the installation of the revegetation areas, both on site as well as off site, and shall monitor the installation and maintenance effort periodically as necessary during the initial installation, as well as during the initial 120-day plant establishment period. The monitor shall provide periodic site observation status reports and a final letter report at the end of the 120-day plant establishment period in order to document the successful completion of the initial implementation phase.

2.8 Maintenance Requirements

All mitigation/revegetation areas will be maintained during an initial 120-day plant establishment maintenance period following installation and then throughout a 5-year maintenance and monitoring period until successful fulfillment of the project's success criteria. All maintenance procedures shall follow the guidelines established in the conceptual mitigation plan report document and the final conditions of the county and resource agencies. The goal will be to help foster adequate plant establishment, as well as to control non-native weeds and exotic plant species, so that the intended native species and habitats can develop and establish over time as anticipated. The maintenance contractor shall provide sufficient maintenance to assure survival of the mitigation/revegetation plantings until they can survive on their own without artificial support and can become self sustaining.

2.9 Monitoring Requirements

All mitigation/revegetation areas will be monitored during the installation, including throughout the initial 120-day plant establishment period, and then throughout the 5-year maintenance and monitoring period, in order to help assure project success. Monitoring shall be conducted by a qualified habitat restoration designer/biologist in order to implement the biological intent for the mitigation/revegetation program. Qualifications for the monitor shall be outlined in the Conceptual Mitigation and Monitoring Plan (Mitigation Plan).

Biological monitoring will be conducted to evaluate the progress of the revegetation/mitigation program both qualitatively (i.e., visually) and quantitatively (i.e., data collection and analysis). Periodic monitoring visits and reporting will be conducted as specified in the Mitigation Plan.

The project will be assessed against specific success standards and criteria as defined in the Mitigation Plan. Year-end monitoring reports will be prepared and submitted to the applicable parties and agencies as documentation of the progress of the project.

At the end of the designated 5-year maintenance and monitoring period, the project will be visited by all appropriate parties and agencies in order to determine completion of the 5-year program and acceptance by the permitting agencies.

2.10 Success Criteria

Specific success criteria shall be outlined in the Final Mitigation Plan. Criteria shall be established for each intended wetland habitat type to be revegetated and or enhanced as part of the overall wetland mitigation program. The criteria shall outline the intended standards for each year of the program through 5 years, and will include percent cover of native species, percent cover of non-native/exotic species, and tree height goals for selected representative tree species. The criteria shall outline appropriate remedial measures and procedures that should be implemented in any given year should the success criteria not be met.

2.11 Long-Term Management

All wetland mitigation areas shall ultimately become part of preserved biological open space. The on-site areas will be part of the on-site biological open space preserve area. The off-site parcels shall be protected in perpetuity through the establishment of conservation open space easements over the designated parcels. All wetland mitigation areas will be managed as part of the overall open space area, per the long-term management measures outlined in the Resource Management Plan.

3.0 CONCEPTUAL UPLAND REVEGETATION PLAN

3.1 Upland Revegetation Requirement Summary

The proposed Merriam Mountains project will impact various upland habitats. Upland mitigation acreage will be provided on site in current disturbed or ruderal areas where reasonable opportunities exist for upland habitat creation and restoration, as well as off site at various locations. The proposed on-site revegetation sites include the old airstrip/runway location and numerous off-road trail and roadway areas that were previously disturbed by prior site activities. Acreage also includes portions of the old rock quarry areas that can reasonably support upland habitat creation/restoration.

The proposed on-site and off-site upland mitigation acreages are shown in *Table 2*.

TABLE 2
Upland Mitigation Requirements for Development Impacts

Habitat Category	Total Impact*	Mitigation Ratio	Preserved On Site	Mitigation Acre
Diegan coastal sage scrub	27.3	2:1	5.5	49.1*
Non-native grassland	20.7	0.5:1	3.7	6.6
Coast live oak woodland (upland only)	2.3	3:1	1.9	5.0**
Total	**51.3**			**68.2****

* Impacts include both on site as well as off site.
** Mitigation partially compensated for through acquisition of Captain's Associates parcel at an off-site location.

3.2 Upland Mitigation

The potential for upland mitigation creation and enhancement acreage on site was evaluated by Dudek within the project boundaries and several suitable locations were identified. The chosen locations offered the best opportunities to achieve reasonably sized upland mitigation/ revegetation areas that could ultimately become self-sustaining over time and connect with existing upland resources within the adjacent habitat areas.

One of the chosen on-site upland mitigation locations is in proximity to the old airstrip area, in the north central portion of the site, in a location which will be preserved as part of the project's permanent biological open space (see *Figures 1* and *2*). This location would be contiguous with and adjacent to the proposed wetland mitigation/revegetation area that is addressed in previous sections. This location is surrounded primarily by chaparral vegetation, with some minor patches of remnant wetland vegetation. This location lies in a broad valley with an ephemeral drainage running through it, which drains from east to west. Secondary drainages enter from both the south and north sides of the valley and join the main drainage before it drops down the canyon to the west through existing southern mixed chaparral habitat. The disturbed areas within this site are the result of past off-road vehicle activities, which created numerous trails and roadways through the chaparral habitat.

Much of this area was previously disturbed by activities associated with the old historic airstrip, associated access roads, disturbances from previous off-road vehicle use, and trash/debris dumping. Much of this area has subsequently been invaded by several exotic/invasive species, including salt cedar (*Tamarix* sp.), pampas grass (*Cortaderia selloana*), and fennel (*Foeniculum vulgare*). Much of the native vegetation has been invaded and displaced by these invasive/exotic species. This area lies adjacent to an area that is also proposed for wetland mitigation/

revegetation, which will strive to link existing remnant wetland vegetation, including patches of arroyo willow (*Salix lasiolepis*) and mulefat (*Baccharis salicifolia*). The proposed upland revegetation effort would be along the margins of the proposed wetland revegetation areas and will help provide a better vegetated upland buffer adjacent to the wetland mitigation areas.

Preliminary estimates indicate that there are approximately 2.0 acres of upland CSS creation area and approximately 0.7 acre of upland CSS enhancement area that could be achieved within this old airstrip location. Also, at this location, as well as elsewhere throughout the open space area, there are approximately 7.7 acres of old roadways and trails that could be revegetated to restore native upland habitat lost from the previous site activities. This number excludes those roadways that would be used for the permanent on-site trail system, as well as those roads that lie in existing water utility easements that might be needed for future pipeline access. In addition, there are approximately 14 acres of disturbed area at the base of the two old rock quarry sites that could be revegetated to a combination of CSS and non-native grassland (NNG) habitat. Thus, overall there would be a total of approximately 25.0 acres of potential upland CSS and NNG mitigation/revegetation acreage within the entire biological open space area on site (see *Figures 1* and *2*). The remainder of the mitigation requirement would be satisfied through habitat acquisition, preservation, and revegetation off site.

The mitigation/revegetation goal would be to create and restore Diegan coastal sage scrub (DCSS) and non-native grassland (NNG) habitat within disturbed portions of the biological open space areas on site to provide enhanced native habitat quality. The required mitigation for Diegan coastal sage scrub would include a DCSS/grassland mosaic restoration on site at the airstrip and at the quarry sites (see *Figure 2*).

To achieve this, the mitigation/revegetation program will need to remove the exotic/invasive species, remove all trash and debris, and eliminate the off-road vehicle trails and roads through these areas. Once this is completed, appropriate upland plant species would be installed to support the intended habitat expansion/creation and enhancement. Finish grading would be conducted within the upland mitigation/revegetation areas to eliminate compaction and to restore appropriate soil conditions to facilitate plant growth. Grades would be established to blend better with the adjacent native habitat areas and to eliminate erosion scars where necessary. This will thereby allow for the connection of the remnant patches of chaparral and Diegan coastal sage scrub vegetation, and would help provide a larger contiguous upland DCSS/chaparral area. This will also help provide improved habitat quality for the remnant upland patches and will help expand upon upland resources throughout the biological open space. This will also help provide important wildlife resources, habitat connectivity and expansion.

Required mitigation for non-native grassland, consisting of 6.6 acres of non-native grassland, would be achieved through planting of grassland in yet to be determined disturbed locations within on-site biological open space. A grassland seed mix is provided below in *Table 3, Transitional Grassland Seed Mix* and would be utilized for seeding in these areas following appropriate site preparation.

TABLE 3
Transitional Grassland Seed Mix
(to be seeded within designated transitional grassland revegetation areas)

Botanical Name	Common Name	PLS	Lbs./Acre
Collinsia heterophylla	Chinese houses	88%	2.0
*Encelia californica**	Bush sunflower	24%	3.0
Eschscholzia californica	California poppy	74%	2.0
Lotus scoparius	Deerweed	54%	6.0
Plantago insularis	Plantain	74%	10.0
Sisyrichium bellum	Blue-eyed grass	71%	2.0
Lasthenia glabrata	Goldfields	30%	2.0
Lupinus bicolor	Dove lupine	78%	4.0
*Mimulus aurantiacus**	Sticky monkeyflower	4%	4.0
Nassella pulchra	Purple needlegrass	42%	5.0
Total Lbs. Per Acre		**40.0****	

* Indicates locally collected seed from coastal San Diego County.
** Hydroseed slurry: Seed mix – at rates indicated above, virgin wood fiber mulch @2,000 lbs./acre, binder ("Az-Tac" or approved equal) @ 100 lbs./acre (or approved equal), commercial fertilizer (0-45-0) @ 400 lbs. per acre green slurry marker dye.

The 5 acres of required mitigation for impacts to coast live oak woodland would occur both on site as well as off site within yet to be determined locations. Existing oaks within the fuel modification areas on site will be trimmed up for fuel modification purposes rather than being removed.

3.3 Site Preparation, Grading, and Planting Requirements for the Upland Mitigation/Revegetation Areas

The areas proposed for upland mitigation/revegetation both on site as well as off site shall be adequately prepared prior to planting. Site preparation shall include clearing and grubbing of all non-native/exotic species and disposal off site at an appropriate facility. All man-made trash and debris shall also be removed and disposed of properly off site. The areas shall then be finish graded where appropriate to provide uniform planting elevations relative to the adjacent upland vegetation.

Stability of graded areas and planting surfaces will be achieved through the use of erosion control measures and through appropriate planting and seeding in order to provide adequate erosion protection adjacent to any existing drainages. Upland vegetation in the creation and enhancement areas will be selected to expand upon the existing upland resources and habitat areas.

All plant materials specified for the upland mitigation/revegetation areas will be native species appropriate to the area and the habitats being created/enhanced and will be compatible with the existing adjacent native habitat areas. Plant material selections, sizes, and quantities will be appropriate to help assure adequate plant establishment and to help achieve the goal of self sustainability of the revegetated habitats by the end of an initial 5-year time frame. A mixture of container plantings and seeding will be utilized as appropriate to the areas being planted and as specified on the final conceptual mitigation plan and the final revegetation construction documents (i.e., plans, details, and specifications).

Soil conditions in the areas to be revegetated will be tested after finish grading operations are complete and shall be evaluated by a soil and plant laboratory in order to determine soil fertility and agricultural suitability for the intended vegetation and habitat types. Amending of infertile soils may be necessary if soils analysis results indicate that deficiencies exist within the site soils that could affect the growth of the intended native species. All amending requirements will be specified on the final revegetation construction documents.

3.4 On-Site Uplands Revegetation Mitigation and Monitoring Plan

A written Final Uplands Mitigation and Monitoring Plan (Mitigation Plan) report will be prepared to outline the intended upland mitigation/revegetation program for the on-site open space locations as well as the off-site locations. The Mitigation Plan will provide conceptual revegetation guidelines addressing the required mitigation program, the implementation procedures, maintenance strategies, monitoring and reporting requirements, and ultimate success standards/criteria by which the program will be evaluated. The Mitigation Plan will include the goals of the program and the implementation guidelines and will include preliminary plan view layouts (i.e., plans and graphics) showing the various intended on-site and off-site revegetation areas. The Mitigation Plan will also include plant palette tables indicating the intended revegetation species, their intended size, spacing on center, densities, and compositions for the various intended upland creation and enhancement areas.

3.5 Final Revegetation Construction Documents

A set of final revegetation construction documents (i.e., plans, details, and specifications) will be prepared by a State of California registered landscape architect/habitat restoration designer in order to implement the biological intent for the various upland mitigation/revegetation areas, as outlined in the Mitigation Plan. The construction documents shall be prepared for all on-site and off-site mitigation/revegetation areas. The plans may either be a comprehensive set of drawings showing all sites, or separate sets of drawings, depending upon the intended revegetation/mitigation implementation, construction, and phasing strategies. The construction documents shall detail all site preparation, grading, irrigation, planting, seeding, and maintenance requirements for the implementation of the on-site and off-site upland mitigation/revegetation areas. The construction documents shall be of sufficient detail for bidding and construction of the mitigation/revegetation areas.

The construction documents shall be reviewed and approved by the County and the appropriate resource agencies as necessary, based upon the final permitting requirements, prior to actual implementation.

3.6 Implementation Requirements

All upland mitigation/revegetation areas will be installed per the requirements outlined in the final revegetation construction documents (i.e., plans, details, and specifications) and shall be maintained for an initial 120-day plant establishment maintenance period. The implementation and maintenance shall be conducted by a licensed Landscape Contractor (State of California C-27) familiar with native habitat restoration/revegetation projects. The contractor shall have a minimum of 3 years of experience in native habitat mitigation installation and maintenance, and shall be able to demonstrate the successful completion of a minimum of three wetland mitigation projects in Southern California.

The implementation of the upland mitigation program shall be monitored by a habitat restoration specialist/biologist familiar with the implementation of upland mitigation programs. The monitor shall verify and document the installation of the revegetation areas and shall monitor the installation and maintenance effort periodically as necessary during the installation, as well as throughout the initial 120-day plant establishment period. The monitor shall provide periodic site observation status reports and a final letter report at the end of the 120-day plant establishment period, in order to document the successful completion of the initial implementation phase, and to officially designate the start of the long-term 5-year maintenance and monitoring period.

3.7 Maintenance Requirements

All upland mitigation/revegetation areas will be maintained during an initial 120-day plant establishment maintenance period following installation and then throughout a 5-year maintenance and monitoring period, until successful fulfillment of the project's success standards/criteria. All maintenance procedures shall follow the guidelines established in the Mitigation Plan and the final conditions of the County and resource agencies. The primary goals will be to help foster adequate plant establishment, as well as to control non-native weeds and exotic/invasive plant species, so that the intended native species and habitats can develop and establish over time as anticipated. The maintenance contractor shall provide sufficient maintenance to assure survival of the mitigation/revegetation plantings until they can survive on their own without artificial support and can become self sustaining.

3.8 Monitoring Requirements

All upland mitigation/revegetation areas will be monitored during the installation, including throughout the initial 120-day plant establishment period and then throughout the 5-year maintenance and monitoring period, in order to document the progress of the program and to help assure project success. Monitoring shall be conducted by a qualified habitat restoration specialist/biologist, in order to implement the biological intent for the mitigation/revegetation program. Qualifications for the monitor shall be outlined in the Mitigation Plan.

Biological monitoring will be conducted to evaluate the progress of the upland revegetation/mitigation program both qualitatively (i.e., visually) as well as quantitatively (i.e., data collection and analysis). Periodic monitoring visits and reporting will be conducted as specified in the Mitigation Plan. The project will be assessed against specific success standards and criteria as defined in the Mitigation Plan. Year-end monitoring reports will be prepared and submitted to the applicable parties and agencies as documentation of the progress of the project.

At the end of the designated 5-year maintenance and monitoring period, the monitor, on behalf of the client, shall solicit final acceptance from the County and the resource agencies. At that time, the project will be visited by all appropriate parties and agencies in order to determine completion of the 5-year program and acceptance by the permitting agencies. Evidence of final acceptance shall be provided in writing by the County and the agencies.

3.9 Success Standards/Criteria

Specific success standards/criteria shall be outlined in the Mitigation Plan. Criteria shall be established for the intended upland habitat types to be revegetated and/or enhanced as part of the overall upland mitigation program. The standards/criteria shall outline the intended goals and measures of success for each year of the program through 5 years, and will include percent cover of native species, percent cover of non-native/exotic species, and tree height goals for selected representative tree species. The criteria shall outline appropriate remedial measures and procedures that should be implemented in any given year should the success standards/criteria not be met.

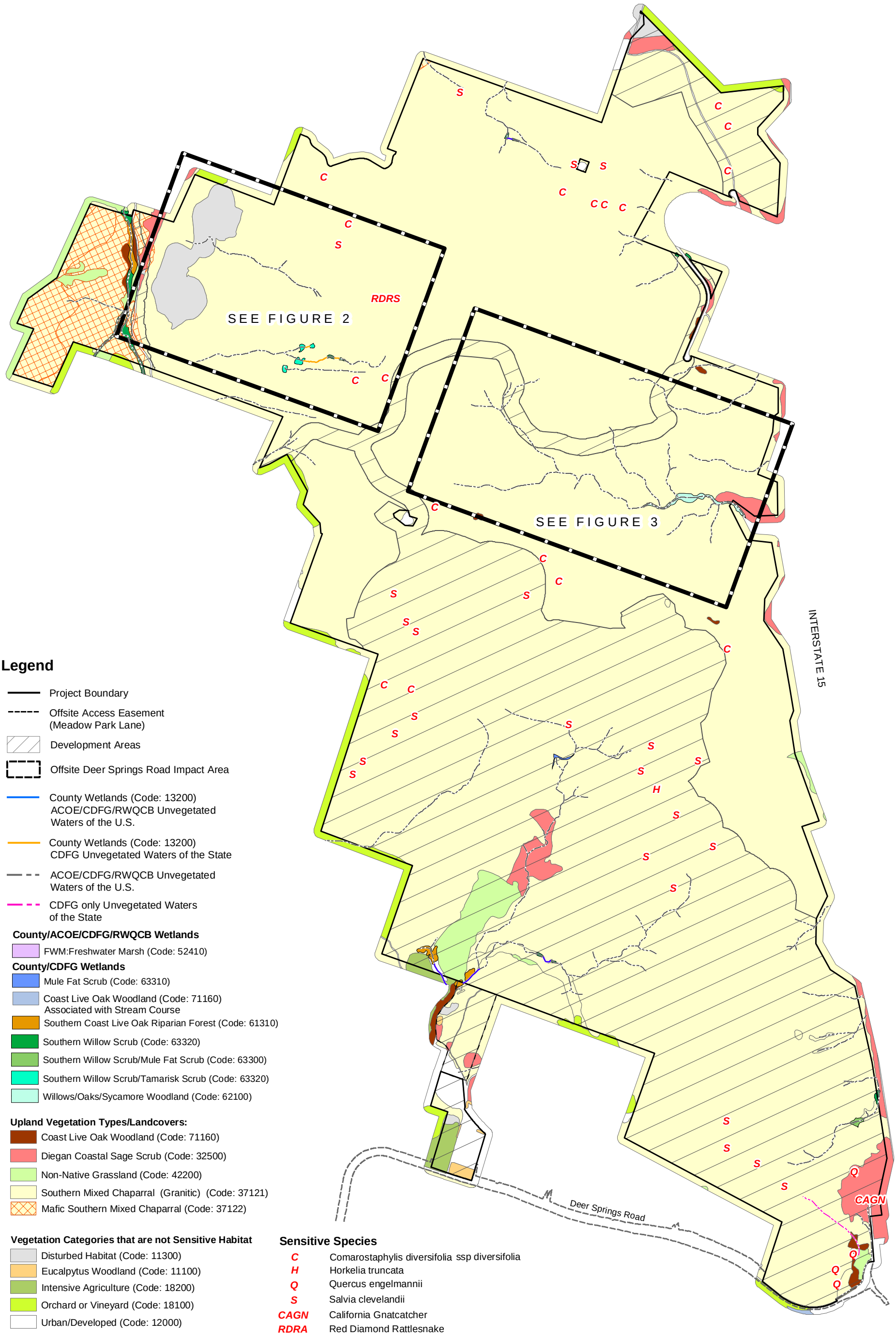
3.10 Long-Term Management

All upland mitigation areas shall ultimately become part of preserved biological open space on site and protected parcels off site, and shall be protected and managed in perpetuity. The on-site areas will be part of the on-site biological open space preserve area. All on-site upland mitigation areas will be managed as part of the overall open space area, per the long-term management measures outlined in the Resource Management Plan. All off-site mitigation areas shall be managed per the standards of the County.

4.0 LITERATURE CITED

Dudek. 2006. Merriam Mountains Specific Plan, Appendix F, Resource Protection Study.

San Diego, County of. 2007. Department of Planning and Land Use. San Diego County Code, Section 86.601 et seq. Resource Protection Ordinance.



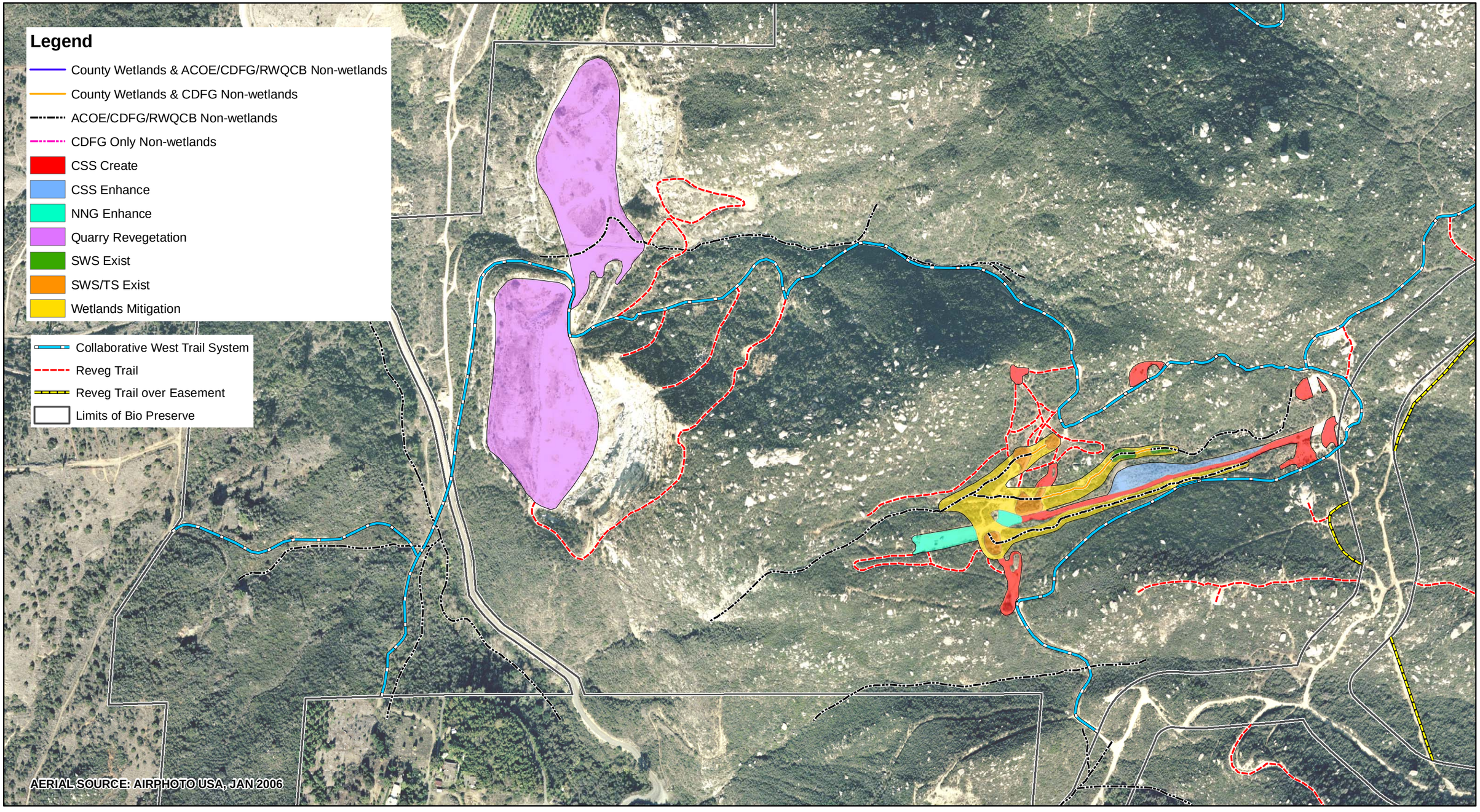
Wetlands and Uplands Onsite Mitigation Conceptual Revegetation Plan Index

FIGURE 1

MERRIAM MOUNTAINS SPECIFIC PLAN
WETLANDS AND UPLANDS CONCEPTUAL REVEGETATION PLAN

0 0.125 0.25 0.5
Miles

N



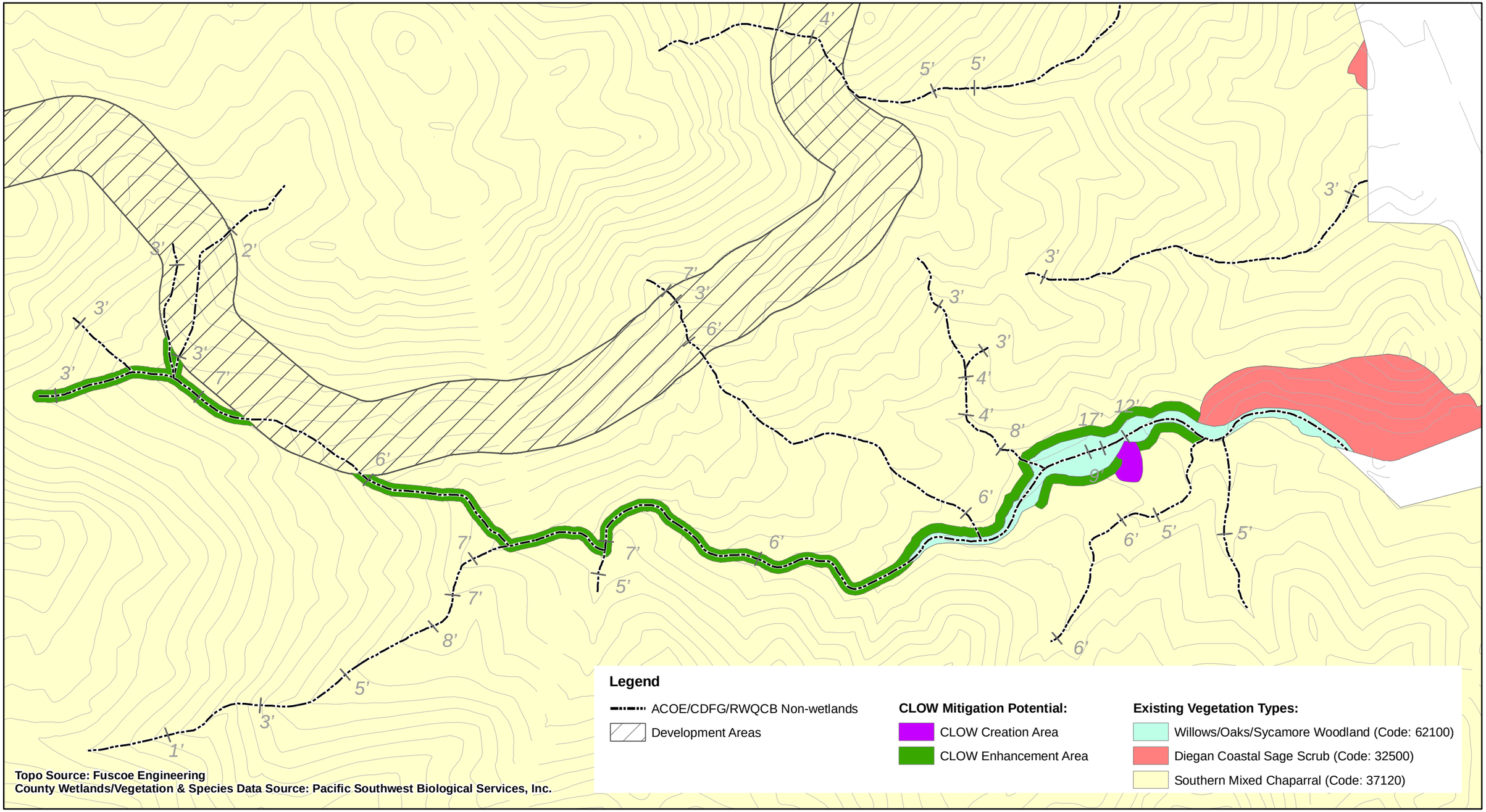
Willow Scrub Wetlands and Coastal Sage Scrub Uplands Revegetation at Abandoned Airstrip and Quarry

FIGURE 2

MERRIAM MOUNTAINS SPECIFIC PLAN
WETLANDS AND UPLANDS CONCEPTUAL REVEGETATION PLAN

0 200 400 800 Feet

N



Coast Live Oak Woodland Mitigation Potentials at Main Onsite Open Space Drainage

FIGURE 3

MERRIAM MOUNTAINS SPECIFIC PLAN
WETLANDS AND UPLANDS CONCEPTUAL REVEGETATION PLAN

0 150 300 600 Feet

N

APPENDIX C

Captain's Associates Letter

DUDEK
& ASSOCIATES, INC.
Professional Teams for Complex Projects

Engineering, Planning,
Environmental Sciences and
Management Services

Corporate Office:
605 Third Street
Encinitas, California 92024

760.942.5147
Fax 760.632.0164

April 6, 2005 4582-01

Ms. Tara Johnson
Stonegate Development, LLC
27071 Cabot Road, Suite 106
Laguna Hills, California 92653

Subject: ***Summary of Findings for a Biological Reconnaissance of the Captain's Associates Property, County of San Diego, California***

Dear Ms. Johnson:

This letter documents the results of a brief biological reconnaissance survey conducted by Dudek and Associates, Inc. (Dudek) for the approximately 32-acre Captain's Associates property (study area) located in the County of San Diego, California. The purpose of this letter is to provide a qualitative assessment of the existing conditions onsite and is not intended to provide a quantitative account of the habitat onsite.

LOCATION

The study area is located approximately one half mile south of the intersection of Nelson Way and Old Highway 395 and approximately one half mile east of Interstate 15, County of San Diego, California. It is situated on the USGS Bonsall quadrangle: SW1/4 of Section 25, NW 1/4 of Section 36, Range 3W, Township 10S. Elevations onsite range from approximately 500 to 700 feet above mean sea level. *Figure 1* provides an aerial photo of the study area.

METHODS

The survey was conducted by Dudek biologist Jeff Priest on March 17 and 28, 2005 (*Table 1*). The property was assessed for general habitat quality, suitability for coastal California gnatcatchers (*Polioptila californica californica*; gnatcatcher) and to determine if SANDAG habitat mapping was generally consistent with the current existing conditions. The property was surveyed by foot with the aid of binoculars (7X50).

TABLE 1
Schedule of Surveys - Captain's and Associates Property

Date	Time	Observer	Environmental Conditions
3/17/05	0920-1020	Priest	80%-90% cloud cover, wind 2-6 mph, 65-66 degrees F.
3/28/05	0720-0845	Priest	95%-65% cloud cover, wind 0-4 mph, 60-66 degrees F.

RESULTS

Habitat Assessment

The study area supports high quality (i.e., intact, mature) native habitats including coastal sage scrub, southern mixed chaparral and live oak woodland. The existing habitat is generally consistent with the mapping provided by SANDAG (see *Figure 2*). Due to the high quality of habitats onsite, this area would serve well as an offsite mitigation area.

California Gnatcatcher Assessment

Coastal sage scrub onsite is high quality and is suitable for gnatcatchers. According to the CNDDB Database, a coastal California gnatcatcher was detected onsite on April 15, 2004. Additionally, Dudek detected a single male coastal California gnatcatcher onsite, within coastal sage scrub on March 28, 2005 (see *Figure 3*).

Wildlife Observed

Twenty-eight (28) species of wildlife were observed during the assessment, however, based on the high quality of habitat onsite, a number a additional native species are expected to occur onsite. Species observed during the surveys include: lesser goldfinch (*Carduelis psaltria*), California towhee (*Pipilo crissalis*), wrentit (*Chamaea fasciata*), Anna's hummingbird (*Calypte anna*), house finch (*Carpodacus mexicanus*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*), red-tailed hawk (*Buteo jamaicensis*), yellow-rumped warbler (*Dendroica coronata*), song sparrow (*Melospiza melodia*), Bewick's wren (*Thryomanes bewickii*), spotted towhee (*Pipilo erythrophthalmus*), bushtit (*Psaltriparus minimus*), rufous hummingbird (Selasphorus rufus), scrub jay (*Aphelocoma coerulescens*), California thrasher (*Toxostoma redivivum*), California quail

(*Callipepla californica*), common raven (*Corvus corax*), Coyote (*Canis latrans*), Botta's pocket gopher (*Thomomys bottae*), mule deer (*Odocoileus hemionus*), California ground squirrel (*Spermophilus beecheyi*), woodrat (*Neotoma* ssp. {midden}), side-blotched lizard (*Uta stansburiana*), southern alligator lizard (*Gerrhonotus multicarinatus*), west coast lady butterfly (*Vanessa annabella*), painted lady (*Vanessa cardui*), and buckeye (*Junonia coenia*).

If you have any questions regarding the contents of this letter, please do not hesitate to contact me or Drew Garner at (760) 942-5147.

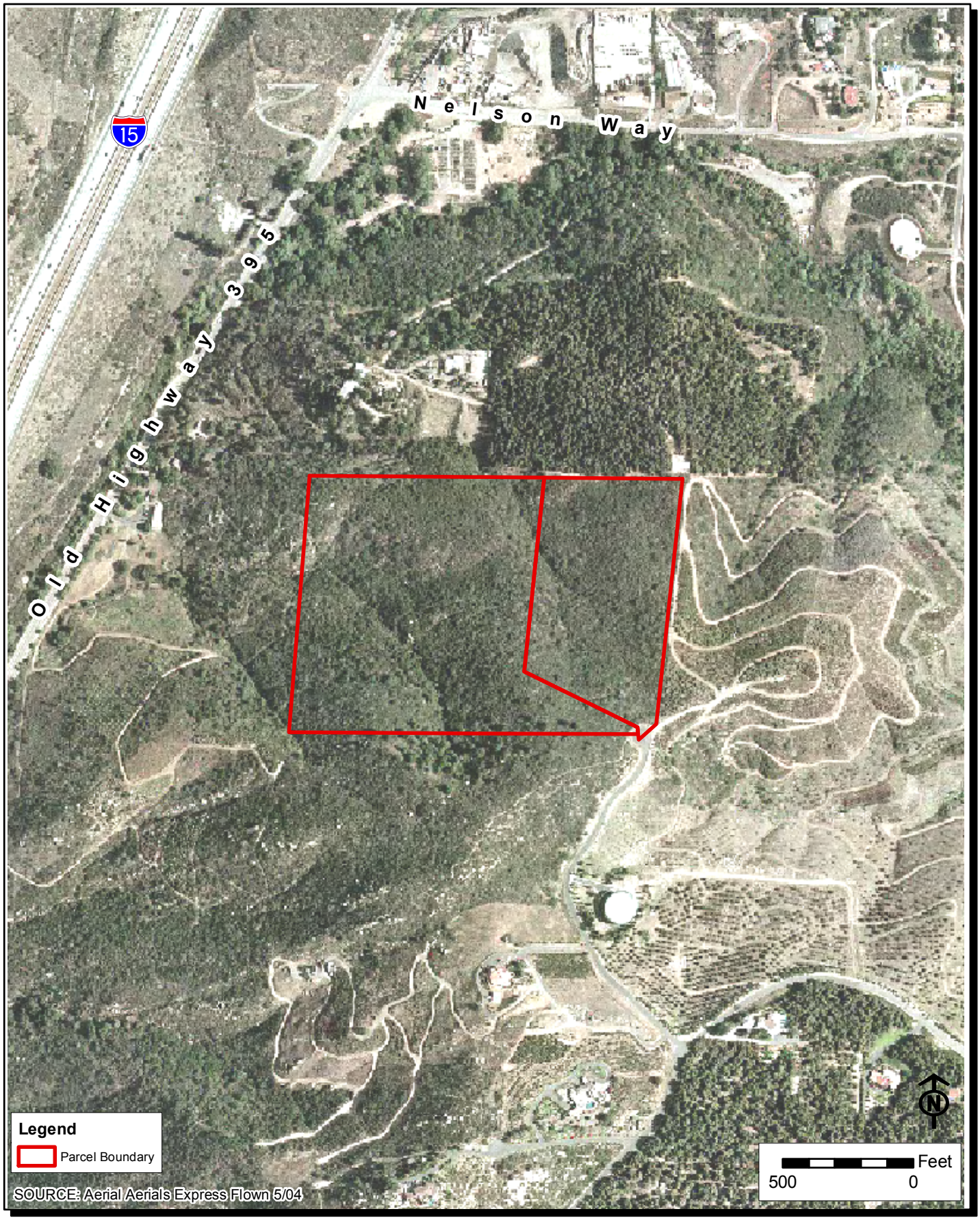
Very truly yours,

DUDEK & ASSOCIATES, INC.

Jeff D. Priest
Project Manager/Wildlife Biologist III

Att: Figures 1-3

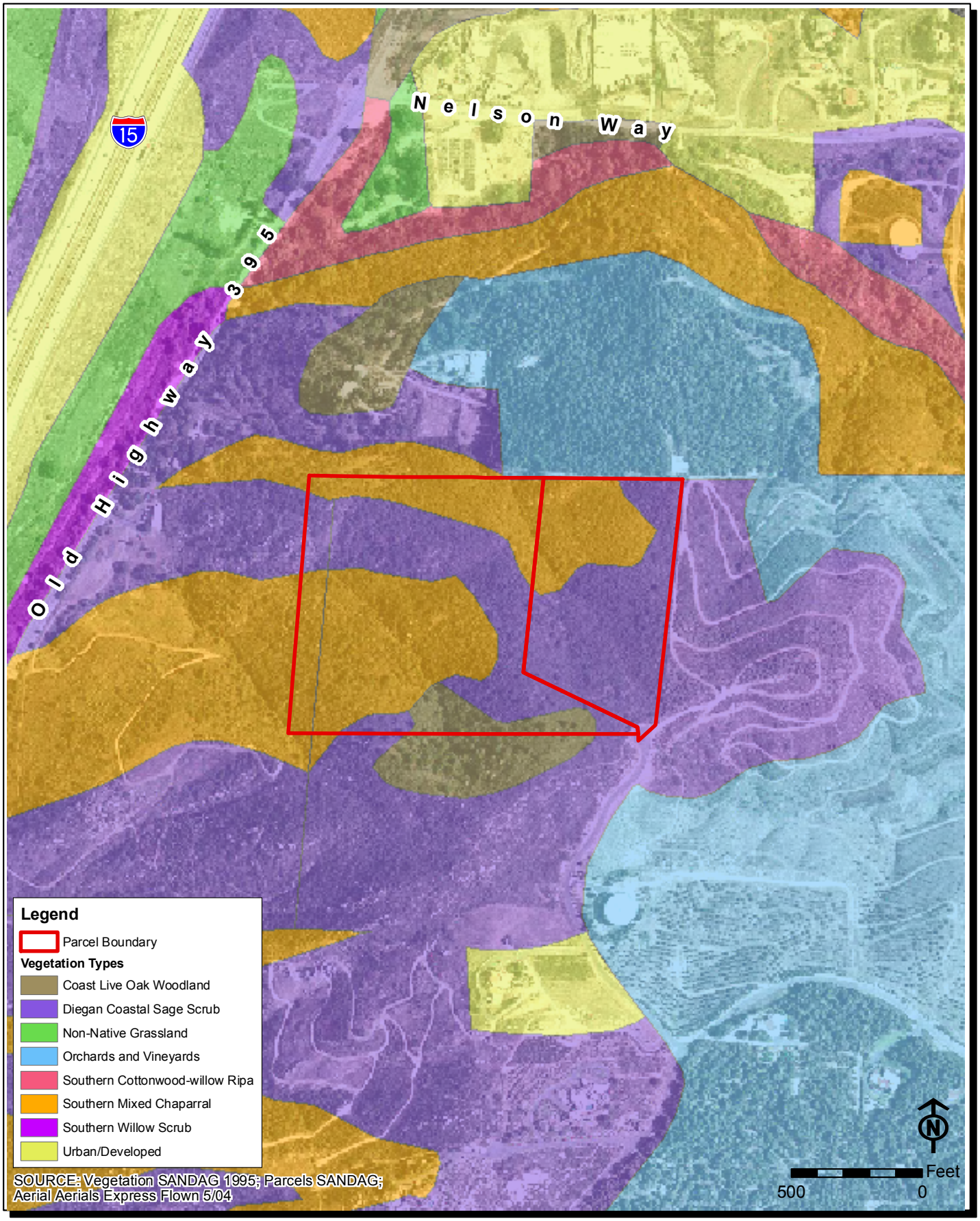
cc: Joe Perring, Stonegate
June Collins, Dudek
Andrew Garner, Dudek



Captain's Associates Project

Aerial Photo Map

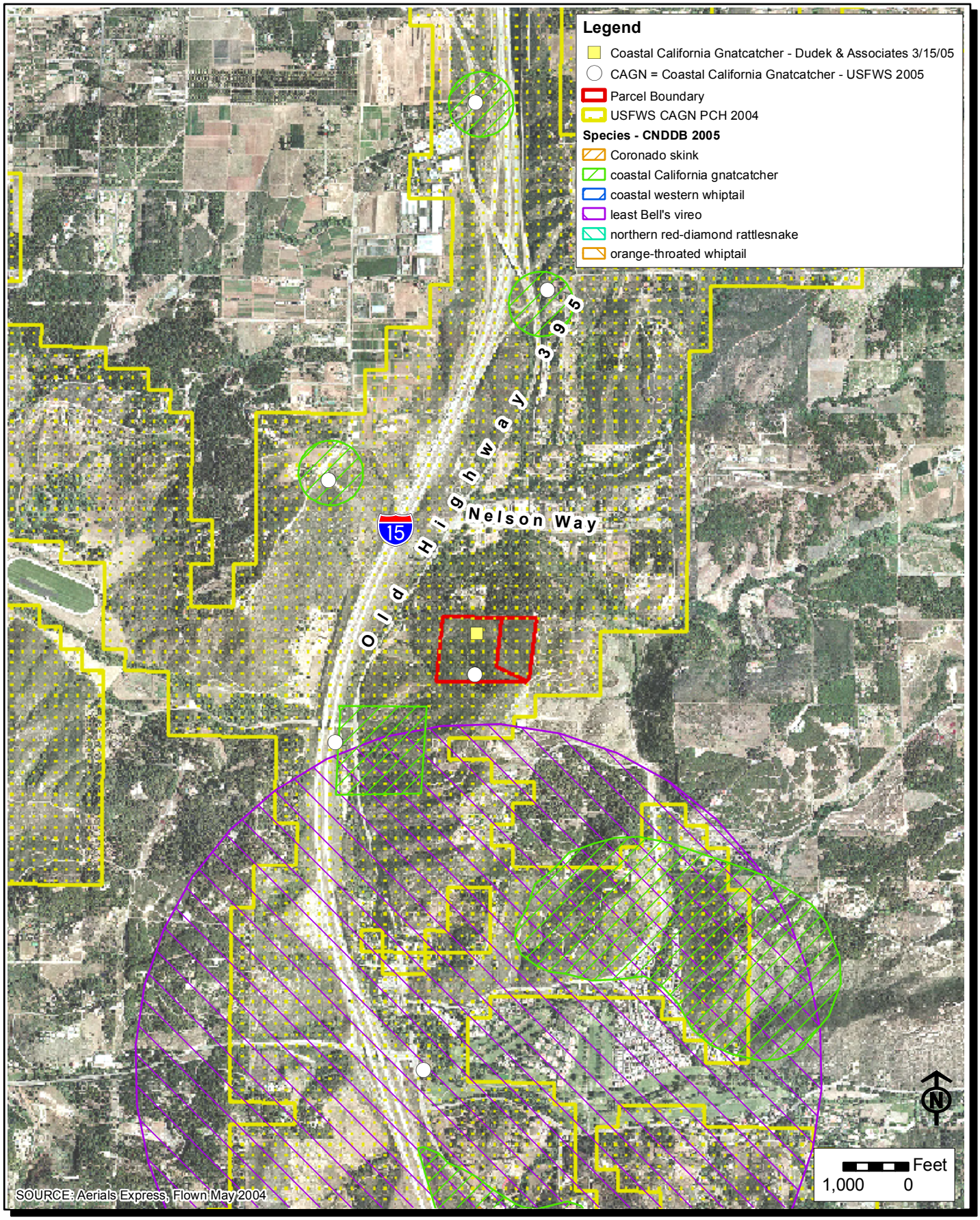
FIGURE 1



Captain's Associates Project

SANDAG Vegetation Types

FIGURE
2



Captain's Associates Project

Sensitive Species Map

FIGURE 3

APPENDIX D

Merriam Mountains
Conceptual Property Analysis Record (PAR)
Section 8: Initial + Capital Tasks and Costs
Section9: Ongoing Tasks and Costs

Prepared by:

DUDEK

Contact: Vipul Joshi

PAR(1300 ac.)

	Rate %	Total $
INITIAL FINANCIAL REQUIREMENTS		
I & C Revenue		0
I & C Management Costs		130,895
I & C Contingency Expense	10.00	13,090
Total I & C Management Costs		143,985
I & C Administrative Costs of Total I & C Management Costs	22.00	31,677
Total I & C Costs		175,662
Net I & C Management and Administrative Costs		175,662
ANNUAL ONGOING FINANCIAL REQUIREMENTS		
Ongoing Costs		39,607
Ongoing Contingency Expense	10.00	3,961
Total Ongoing Management Costs		43,568
Ongoing Administrative Costs of Total Ongoing Management costs	22.00	9,585
Total Ongoing Costs		53,153
ENDOWMENT REQUIREMENTS FOR ONGOING STEWARDSHIP		
Endowment to Provide Income of $ 53,153		1,181,178
Endowment per Acre is $ 909.		
Ongoing Management Costs Based on 4.50% of Endowment per Year.		
Ongoing Management Funding is $ 53,153 per Year Resulting in $41 per Acre per Year.		
TOTAL CONTRIBUTION		1,356,840

Section 9 - Ongoing Tasks and Costs

Property Title: Merriam Mtns HMP - Jan06 Dataset: CA005 PAR ID: MERRIAM 01/13/2006

Budget: PAR

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	24.00	45.00	1,080.00	1	1,080.00
Landscape Ecologist	Field Svy. & Reports	L. Hours	40.00	45.00	1,800.00	1	1,800.00
Plant Ecologist	Field Svy & Reports	L. Hours	80.00	45.00	3,600.00	3	1,200.00
Wildlife Biologist	Field Svy. & Reports	L. Hours	80.00	45.00	3,600.00	3	1,200.00
Wildlife Biologist	Focused Surveys - CAGN	L. Hours	24.00	45.00	1,080.00	1	1,080.00
Wildlife Biologist	Focused Surveys - Pot Fut.	L. Hours	60.00	45.00	2,700.00	10	270.00
Sub-Total							6,630.00
HABITAT RESTORATION							
Conceptual Plan	Preliminary Plan/Rpt.	L. Hours	40.00	45.00	1,800.00	5	360.00
Restoration Plan	Final Plan/Report	L. Hours	60.00	45.00	2,700.00	5	540.00
Irrigation Plan	Final Plan/Report	L. Hours	60.00	45.00	2,700.00	5	540.00
Project Management	Supervise/coordinate	L. Hours	24.00	45.00	1,080.00	5	216.00
Organic Debris Removal	Dump fee	Unit	1.00	150.00	150.00	5	30.00
Organic Debris Removal	Equipment, Hourly	Unit	20.00	75.00	1,500.00	5	300.00
Organic Debris Removal	Clear & Grub	Acre	25.00	350.00	8,750.00	25	350.00
Non-organic Debris Removal	Dump fee	Unit	1.00	150.00	150.00	1	150.00
Non-organic Debris Removal	Equipment, Hourly	Unit	20.00	75.00	1,500.00	1	1,500.00
Erosion Control	Slope Stabilization	L. Hours	20.00	15.00	300.00	5	60.00
Erosion Control	Silt Fence	Lin. Ft.	500.00	14.00	7,000.00	5	1,400.00
Seed Procurement	Native grasses, 85%	Lb	5.00	85.00	425.00	5	85.00
Hydroseed	Hydroseed	Acre	15.00	600.00	9,000.00	30	300.00
Seeding	Hand seeding	Acre	10.00	700.00	7,000.00	20	350.00
Irrigation System	Hand Watering	L. Hours	40.00	15.00	600.00	5	120.00
Exotic Plant Control	Hand Removal, Labor	L. Hours	40.00	15.00	600.00	1	600.00
Exotic Plant Control	Herbicide 41% con.	Gal.	2.00	108.60	217.20	2	108.60
Feral Animal Control	Trap, 16lb. Cal96	Item	2.00	53.00	106.00	5	21.20
Feral Animal Control	Trap Labor	L. Hours	40.00	25.00	1,000.00	5	200.00
Sub-Total							7,230.80
HABITAT MAINTENANCE							
Erosion Control	Slope Stabilization	L. Hours	40.00	15.00	600.00	5	120.00
Erosion Control	Silt Fence	Lin. Ft.	500.00	14.00	7,000.00	5	1,400.00
Other	Adaptive Management	Item	1.00	2,000.00	2,000.00	1	2,000.00
Sub-Total							3,520.00

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
PUBLIC SERVICES							
Patrolling	Patrol	L. Hours	200.00	15.00	3,000.00	1	3,000.00
Sign, Aluminum	Aluminum 12" X 12"	Item	100.00	15.00	1,500.00	7	214.29
Kiosk, Redwood	4' x 3'	Item	4.00	1,200.00	4,800.00	10	480.00
Volunteer Coordinator	Meetings	L. Hours	40.00	30.00	1,200.00	1	1,200.00
Community Outreach	Meetings	L. Hours	40.00	45.00	1,800.00	1	1,800.00
Sub-Total							6,694.29
GENERAL MAINTENANCE							
Project Management	Supervise/coordinate	L. Hours	80.00	45.00	3,600.00	1	3,600.00
Sub-Total							3,600.00
REPORTING							
Database Management	Data Input	L. Hours	20.00	45.00	900.00	1	900.00
GIS/CAD Management	Data Management	L. Hours	20.00	45.00	900.00	1	900.00
Annual Work Plan	Plan and PAR Budget	L. Hours	20.00	45.00	900.00	1	900.00
Agency Report	Annual Report	L. Hours	40.00	45.00	1,800.00	1	1,800.00
Management Plan	Initial Report	L. Hours	40.00	45.00	1,800.00	5	360.00
Monitoring Reports	Monitoring Documentation	L. Hours	24.00	45.00	1,080.00	1	1,080.00
Sub-Total							5,940.00
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	0.25	45.00	11.25	1	11.25
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	0.25	1.00	0.25	1	0.25
Telephone Charges, Annual	Phone Charges	Person	1.00	1,200.00	1,200.00	1	1,200.00
Office Supplies, Year	Stationery/envelopes	Person	0.25	125.00	31.25	1	31.25
Office Supplies, Year	Supplies	Person	0.25	192.00	48.00	1	48.00
Furniture	Desk	Item	0.25	250.00	62.50	10	6.25
Furniture	Chair	Item	0.25	150.00	37.50	5	7.50
Furniture	Bookcase, 3'x5'	Item	1.00	150.00	150.00	8	18.75
Furniture	File cabinet	Item	1.00	400.00	400.00	10	40.00
Copier	Copier, 15-18 ppm	Item	0.25	3,833.00	958.25	8	119.78
Fax Machine	Standard	Item	0.25	400.00	100.00	5	20.00
E-Mail	Services	Year	0.25	360.00	90.00	1	90.00
Voice Mail	Voice Mail, Annual	Item	0.25	250.00	62.50	5	12.50
Cellular Pager	Unit	Unit	0.25	120.00	30.00	5	6.00
Cellular Pager	Services	Year	0.25	720.00	180.00	1	180.00
Computer, PC & Monitor	133 MHz Pentium	Item	0.25	2,100.00	525.00	4	131.25
Computer software	Microsoft Office Pkg	Item	0.25	450.00	112.50	4	28.13
Laser Printer	HP LaserJet 5L	Item	0.25	500.00	125.00	4	31.25
Sub-Total							1,382.16

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
FIELD EQUIPMENT							
GPS, Rover & Base Unit	GPS/Corrected	Item	0.25	10,000.00	2,500.00	5	500.00
Vehicle	Small pickup	Item	0.25	16,000.00	4,000.00	8	500.00
Vehicle	Mileage	Mile	1,000.00	0.50	500.00	1	500.00
Camera 35mm/lens	Mid-range camera	Item	0.25	1,500.00	375.00	5	75.00
Sub-Total							1,575.00
OPERATIONS							
Audit	CPA Audit	Acre	1,300.00	0.25	325.00	1	325.00
Contracts	Produce contracts	L. Hours	4.00	60.00	240.00	1	240.00
Endowment	Process endowment	L. Hours	20.00	30.00	600.00	1	600.00
Insurance	General	L. Hours	4.00	30.00	120.00	1	120.00
Insurance	Liability/Fee	Acres	1,300.00	0.55	715.00	1	715.00
Insurance	Liability/Conserv. Easement	Acres	1,300.00	0.15	195.00	1	195.00
Budgeting	Budget & reconcile	L. Hours	4.00	30.00	120.00	1	120.00
Property Tax Exemption	File	L. Hours	4.00	30.00	120.00	1	120.00
Sub-Total							2,435.00
CONTINGENCY & ADMINISTRATION							
Contingency							3,960.70
Administration							9,584.95
Sub-Total							13,545.68
Total							53,152.93

Section 9 - Ongoing Tasks and Costs

Property Title: Merriam Mtns HMP - Jan06 Dataset: CA005 PAR ID: MERRIAM 01/13/2006

Budget: PAR

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	24.00	45.00	1,080.00	1	1,080.00
Landscape Ecologist	Field Svy. & Reports	L. Hours	40.00	45.00	1,800.00	1	1,800.00
Plant Ecologist	Field Svy. & Reports	L. Hours	80.00	45.00	3,600.00	3	1,200.00
Wildlife Biologist	Field Svy. & Reports	L. Hours	80.00	45.00	3,600.00	3	1,200.00
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Wildlife Biologist	Focused Surveys - Pot Fut.	L. Hours	60.00	45.00	2,700.00	10	270.00
Sub-Total							6,630.00
HABITAT RESTORATION							
Conceptual Plan	Preliminary Plan/Rpt.	L. Hours	40.00	45.00	1,800.00	5	360.00
Restoration Plan	Final Plan/Report	L. Hours	60.00	45.00	2,700.00	5	540.00
Irrigation Plan	Final Plan/Report	L. Hours	60.00	45.00	2,700.00	5	540.00
Project Management	Supervise/coordinate	L. Hours	24.00	45.00	1,080.00	5	216.00
Organic Debris Removal	Dump fee	Unit	1.00	150.00	150.00	5	30.00
Organic Debris Removal	Equipment, Hourly	Unit	20.00	75.00	1,500.00	5	300.00
Organic Debris Removal	Clear & Grub	Acre	25.00	350.00	8,750.00	25	350.00
Non-organic Debris Removal	Dump fee	Unit	1.00	150.00	150.00	1	150.00
Non-organic Debris Removal	Equipment, Hourly	Unit	20.00	75.00	1,500.00	1	1,500.00
Erosion Control	Slope Stabilization	L. Hours	40.00	15.00	300.00	5	60.00
Erosion Control	Silt Fence	Lin. Ft.	500.00	14.00	7,000.00	5	1,400.00
Seed Procurement	Native grasses, 85%	Lb.	5.00	85.00	425.00	5	85.00
Hydroseed	Hydroseed	Acre	15.00	600.00	9,000.00	30	300.00
Seeding	Hand seeding	Acre	10.00	700.00	7,000.00	20	350.00
Irrigation System	Hand Watering	L. Hours	40.00	15.00	600.00	5	120.00
Exotic Plant Control	Hand Removal, Labor	L. Hours	40.00	15.00	600.00	1	600.00
Exotic Plant Control	Herbicide 41% con	Gal.	2.00	108.60	217.20	2	108.60
Feral Animal Control	Trap, 16lb. Cat86	Item	2.00	53.00	106.00	5	21.20
Feral Animal Control	Trap, Labor	L. Hours	40.00	25.00	1,000.00	5	200.00
Sub-Total							7,230.80
HABITAT MAINTENANCE							
Erosion Control	Slope Stabilization	L. Hours	40.00	15.00	600.00	5	120.00
Erosion Control	Silt Fence	Lin. Ft.	500.00	14.00	7,000.00	5	1,400.00
Other	Adaptive Management	Item	1.00	2,000.00	2,000.00	1	2,000.00
Sub-Total							3,520.00

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
PUBLIC SERVICES							
Patroling	Patrol	L. Hours	200.00	15.00	3,000.00	1	3,000.00
Sign, Aluminum	Aluminum 12" X 12"	Item	100.00	15.00	1,500.00	7	214.29
Kiosk, Redwood	4'x 3'	Item	4.00	1,200.00	4,800.00	10	480.00
Volunteer Coordinator	Meetings	L. Hours	40.00	30.00	1,200.00	1	1,200.00
Community Outreach	Meetings	L. Hours	40.00	45.00	1,800.00	1	1,800.00
Sub-Total							6,694.29
GENERAL MAINTENANCE							
Project Management	Supervise/coordinate	L. Hours	80.00	45.00	3,600.00	1	3,600.00
Sub-Total							3,600.00
REPORTING							
Database Management	Data Input	L. Hours	20.00	45.00	900.00	1	900.00
GIS/CAD Management	Data Management	L. Hours	20.00	45.00	900.00	1	900.00
Annual Work Plan	Plan and PAR Budget	L. Hours	20.00	45.00	900.00	1	900.00
Agency Report	Annual Report	L. Hours	40.00	45.00	1,800.00	1	1,800.00
Management Plan	Initial Report	L. Hours	40.00	45.00	1,800.00	5	360.00
Monitoring Reports	Monitoring Documentation	L. Hours	24.00	45.00	1,080.00	1	1,080.00
Sub-Total							5,940.00
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	0.25	45.00	11.25	1	11.25
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	0.25	1.00	0.25	1	0.25
Telephone Charges, Annual	Phone Charges	Person	1.00	1,200.00	1,200.00	1	1,200.00
Office Supplies, Year	Stationery/envelopes	Person	0.25	125.00	31.25	1	31.25
Office Supplies, Year	Supplies	Person	0.25	192.00	48.00	1	48.00
Furniture	Desk	Item	0.25	250.00	62.50	10	6.25
Furniture	Chair	Item	0.25	150.00	37.50	5	7.50
Furniture	Bookcase, 3'x5'	Item	1.00	150.00	150.00	8	18.75
Furniture	File cabinet	Item	1.00	400.00	400.00	10	40.00
Copier	Copier, 15-18 ppm	Item	0.25	3,833.00	958.25	8	119.78
Fax Machine	Standard	Item	0.25	400.00	100.00	5	20.00
E-Mail	Services	Year	0.25	360.00	90.00	1	90.00
Voice Mail	Voice Mail, Annual	Item	0.25	250.00	62.50	5	12.50
Cellular Pager	Unit	Unit	0.25	120.00	30.00	5	6.00
Cellular Pager	Services	Year	0.25	720.00	180.00	1	180.00
Computer, PC & Monitor	133 MHz Pentium	Item	0.25	2,100.00	525.00	4	131.25
Computer software	Microsoft Office Pkg	Item	0.25	450.00	112.50	4	28.13
Laser Printer	HP LaserJet 5L	Item	0.25	500.00	125.00	4	31.25
Sub-Total							1,882.16

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
FIELD EQUIPMENT							
GPS, Rover & Base Unit	GPS/Corrected	Item	0.25	10,000.00	2,500.00	5	500.00
Vehicle	Small pickup	Item	0.25	16,000.00	4,000.00	8	500.00
Vehicle	Mileage	Mile	1,000.00	0.50	500.00	1	500.00
Camera 35mmdlens	Mid-range camera	Item	0.25	1,500.00	375.00	5	75.00
Sub-Total							1,575.00
OPERATIONS							
Audit	CPA Audit	Acre	1,300.00	0.25	325.00	1	325.00
Contracts	Produce contracts	L. Hours	4.00	60.00	240.00	1	240.00
Endowment	Process endowment	L. Hours	20.00	30.00	600.00	1	600.00
Insurance	General	L. Hours	4.00	30.00	120.00	1	120.00
Insurance	Liability/Fee	Acres	1,300.00	0.55	715.00	1	715.00
Insurance	Liability/Conserv. Easement	Acres	1,300.00	0.15	195.00	1	195.00
Budgeting	Budget & reconcile	L. Hours	4.00	30.00	120.00	1	120.00
Property Tax Exemption	File	L. Hours	4.00	30.00	120.00	1	120.00
Sub-Total							2,435.00
CONTINGENCY & ADMINISTRATION							
Contingency							3,060.73
Administration							9,584.95
Sub-Total							13,645.68
Total							53,152.93

Section 8 - Initial & Capital Tasks and Costs

Property Title: Merriam Mtns HMP - Jan06 Dataset: CA005 PAR ID: MERRIAM 01/13/2006

Budget: PAR

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	24.00	45.00	1,080.00	2.0	2,160.00
Landscape Ecologist	Field Svy. & Reports	L. Hours	40.00	45.00	1,800.00	1.0	1,800.00
Plant Ecologist	Field Svy. & Reports	L. Hours	80.00	45.00	3,600.00	1.0	3,600.00
Wildlife Biologist	Field Svy. & Reports	L. Hours	80.00	45.00	3,600.00	1.0	3,600.00
Wildlife Biologist	Focused Surveys - CAGN	L. Hours	24.00	45.00	1,080.00	1.0	1,080.00
Sub-Total							12,240.00
HABITAT RESTORATION							
Conceptual Plan	Preliminary Plan/Rpt	L. Hours	40.00	45.00	1,800.00	1.0	1,800.00
Restoration Plan	Final Plan/Report	L. Hours	60.00	45.00	2,700.00	1.0	2,700.00
Irrigation Plan	Final Plan/Report	L. Hours	60.00	45.00	2,700.00	1.0	2,700.00
Project Management	Supervise/coordinate	L. Hours	24.00	45.00	1,080.00	5.0	5,400.00
Organic Debris Removal	Dump fee	Unit	1.00	150.00	150.00	2.0	300.00
Organic Debris Removal	Equipment Hourly	Unit	20.00	75.00	1,500.00	2.0	3,000.00
Organic Debris Removal	Clear & Grub	Acre	25.00	350.00	8,750.00	1.0	8,750.00
Non-organic Debris Removal	Dump fee	Unit	1.00	150.00	150.00	4.0	600.00
Non-organic Debris Removal	Equipment Hourly	Unit	20.00	75.00	1,500.00	2.0	3,000.00
Erosion Control	Slope Stabilization	L. Hours	20.00	15.00	300.00	2.0	600.00
Erosion Control	Silt Fence	Lin. Ft	500.00	14.00	7,000.00	2.0	14,000.00
Seed Procurement	Native grasses, 85%	Lb	5.00	95.00	475.00	5.0	2,375.00
Hydroseed	Hydroseed	Acre	15.00	600.00	9,000.00	1.0	9,000.00
Seeding	Hand seeding	Acre	10.00	700.00	7,000.00	1.0	7,000.00
Irrigation System	Hand Watering	L. Hours	40.00	15.00	600.00	5.0	3,000.00
Exotic Plant Control	Hand Removal, Labor	L. Hours	40.00	15.00	600.00	5.0	3,000.00
Exotic Plant Control	Herbicide 41% con.	Gal.	2.00	108.60	217.20	5.0	1,086.00
Sub-Total							68,061.00
HABITAT MAINTENANCE							
Erosion Control	Slope Stabilization	L. Hours	40.00	15.00	600.00	1.0	600.00
Erosion Control	Silt Fence	Lin. Ft.	500.00	14.00	7,000.00	1.0	7,000.00
Other	Adaptive Management	Item	1.00	2,000.00	2,000.00	1.0	2,000.00
Sub-Total							9,600.00
PUBLIC SERVICES							
Patrolling	Patrol	L. Hours	200.00	15.00	3,000.00	1.0	3,000.00
Sign, Aluminum	Aluminum 12" X 12"	Item	100.00	15.00	1,500.00	1.0	1,500.00
Kiosk, Redwood	4'x 3'	Item	4.00	1,200.00	4,800.00	1.0	4,800.00
Volunteer Coordinator	Meetings	L. Hours	40.00	30.00	1,200.00	1.0	1,200.00
Community Outreach	Meetings	L. Hours	40.00	45.00	1,800.00	1.0	1,800.00
Sub-Total							12,300.00

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
GENERAL MAINTENANCE							
Project Management	Supervise/coordinate	L. Hours	80.00	45.00	3,600.00	1.0	3,600.00
Sub-Total							3,600.00
REPORTING							
Database Management	Data Input	L. Hours	20.00	45.00	900.00	2.0	1,800.00
GIS/CAD Management	Data Management	L. Hours	20.00	45.00	900.00	2.0	1,800.00
Annual Work Plan	Plan and PAR Budget	L. Hours	20.00	45.00	900.00	2.0	1,800.00
Agency Report	Annual Report	L. Hours	40.00	45.00	1,800.00	2.0	3,600.00
Monitoring Reports	Monitoring Documentation	L. Hours	24.00	45.00	1,080.00	2.0	2,160.00
Sub-Total							11,160.00
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	0.25	45.00	11.25	1.0	11.25
Utilities, Annual	Elec., Gas, Water	Sq. Ft	0.25	1.00	0.25	1.0	0.25
Telephone Charges, Annual	Phone Charges	Person	1.00	1,200.00	1,200.00	1.0	1,200.00
Office Supplies, Year	Stationery/envelopes	Person	0.25	125.00	31.25	1.0	31.25
Office Supplies, Year	Supplies	Person	0.25	192.00	48.00	1.0	48.00
Furniture	Desk	Item	0.25	250.00	62.50	1.0	62.50
Furniture	Chair	Item	0.25	150.00	37.50	1.0	37.50
Furniture	Bookcase, 3'x5'	Item	1.00	150.00	150.00	1.0	150.00
Furniture	File cabinet	Item	1.00	400.00	400.00	1.0	400.00
Copier	Copier, 15-18 ppm	Item	0.25	3,833.00	958.25	1.0	958.25
Fax Machine	Standard	Item	0.25	400.00	100.00	1.0	100.00
E-Mail	Services	Year	0.25	360.00	90.00	1.0	90.00
Voice Mail	Voice Mail, Annual	Item	0.25	250.00	62.50	1.0	62.50
Cellular Pager	Unit	Unit	0.25	120.00	30.00	1.0	30.00
Cellular Pager	Services	Year	0.25	720.00	180.00	1.0	180.00
Computer, PC & Monitor	133 MHz Pentium	Item	0.25	2,100.00	525.00	1.0	525.00
Computer software	Microsoft Office Pkg	Item	0.25	450.00	112.50	1.0	112.50
Laser Printer	HP LaserJet 5i	Item	0.25	500.00	125.00	1.0	125.00
Sub-Total							4,124.00
FIELD EQUIPMENT							
GPS, Rover & Base Unit	GPS/Corrected	Item	0.25	10,000.00	2,500.00	1.0	2,500.00
Vehicle	Small pickup	Item	0.25	16,000.00	4,000.00	1.0	4,000.00
Vehicle	Mileage	Mile	1,000.00	0.50	500.00	1.0	500.00
Camera 35mm/lens	Mid-range camera	Item	0.25	1,500.00	375.00	1.0	375.00
Sub-Total							7,375.00

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
OPERATIONS							
Audit	CPA Audit	Acre	1,300.00	0.25	325.00	1.0	325.00
Contracts	Produce contracts	L. Hours	4.00	60.00	240.00	1.0	240.00
Endowment	Process endowment	L. Hours	20.00	30.00	600.00	1.0	600.00
Insurance	General	L. Hours	4.00	30.00	120.00	1.0	120.00
Insurance	Liability/Fee	Acres	1,300.00	0.55	715.00	1.0	715.00
Insurance	Liability/Conserv. Easement	Acres	1,300.00	0.15	195.00	1.0	195.00
Budgeting	Budget & reconcile	L. Hours	4.00	30.00	120.00	1.0	120.00
Property Tax Exemption	File	L. Hours	4.00	30.00	120.00	1.0	120.00
Sub-Total							2,435.00
CONTINGENCY & ADMINISTRATION							
Contingency							13,089.50
Administration							31,676.59
Sub-Total							44,766.09
Total							175,861.09